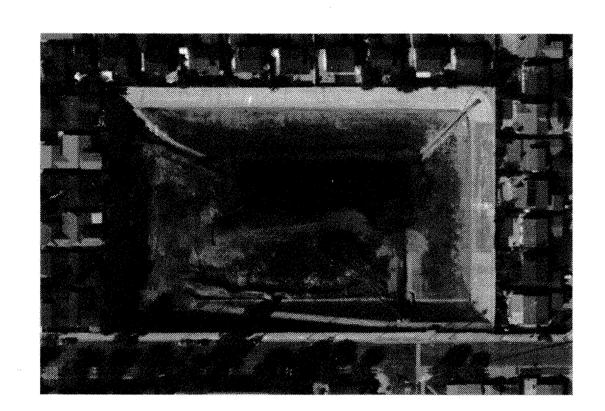
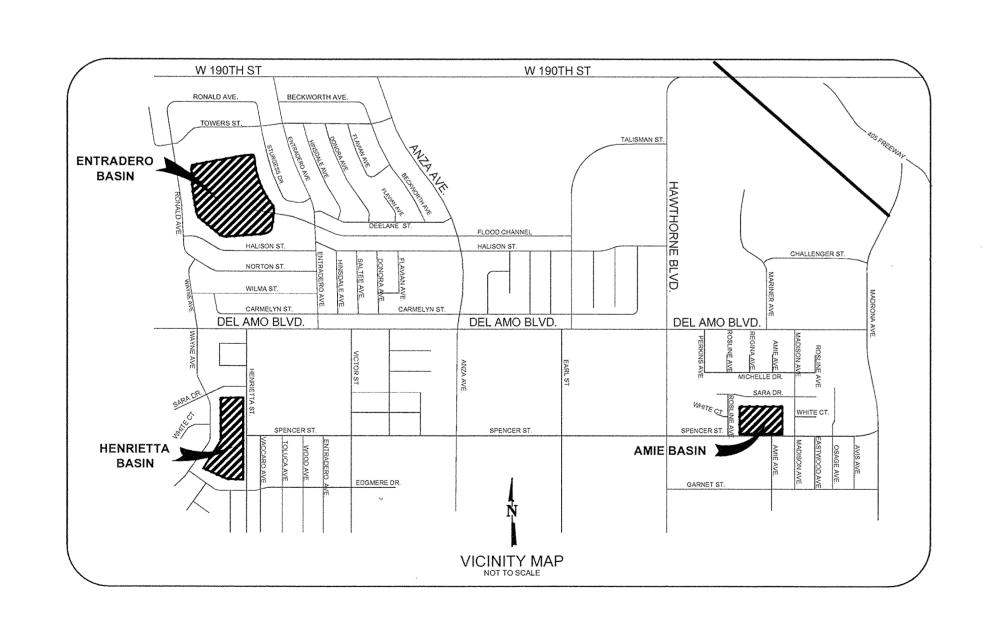
# STORMWATER BASIN ENHANCEMENT PROJECT, C.I.P. NO. 1-102 FOR

AMIE, HENRIETTA AND ENTRADERO BASIN STORMWATER ENHANCEMENT BEST MANAGEMENT PRACTICES (BMPs) PROJECT CITY OF TORRANCE, CALIFORNIA 90503



AMIE BASIN





HENRIETTA BASIN



**ENTRADERO BASIN** 

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PREPARED BY:	DDEDARED DV	Managing Water in the Wes

	REV.	DATE	DESCRIPTION	BY	CHECKED	D PROFESSIONAL J. SENJEL	
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1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831						No. C52060	
(714) 526-7500 OFFICE (714) 526-7004 FAX www.cwecorp.com						EXP. 12-31-14	DIVIS ENGI
						GF CALL	

		LE SHEET: 1-1
	CITY O	F TORRANCE
	PUBLIC WOR	RKS DEPARTMENT
(R)		APPROVED:
<b>*</b>	DRAWN: ALF	
	DESIGNED: C.P.	Jours 5/28/13
A SE	PROJECT VIKRAM BAPNA	TOUFIC J. SEMAAN DATE ACTING CITY ENGINEER R.C.E. NO. 59226 EXP. 06/30/13
FR *		SCALE: AS SHOWN SHEET 1 OF 111
	DIVISION HN DETTLE	PLAN NO. SD - 500

	SHE	ET INDE	X		
PLAN SHEET	SHT NO.	DWG. NO.	PLAN SHEET	SHT NO.	DWG. NO.
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			RECLAIMED WATER DETAILS 2	110	RW-5

		LEG	END	
EXISTING	PROPOSED	DESCRIPTION		
(FG ELEV) (FS ELEV) (TC ELEV)	FG FL FS TC O O S S W W	FINISHED GRADE FLOW LINE FINISHED SURFACE TOP OF CURB CATCH BASIN SD JUNCTION STRUCTURE SEWER MANHOLE SEWER CLEANOUT FIRE HYDRANT GATE VALVE STORM DRAIN SEWER WATER SITE LIGHT (LANDSCAPE)	TG HP INV. B.O.P. T.O.P. TW BW  Q	INDICATES TOP OF GRATE ELEVATION INDICATES HIGH POINT ELEVATION INDICATES INVERT ELEVATION INDICATES BOTTOM OF PIPE INDICATES TOP OF PIPE INDICATES TOP OF WALL ELEVATION INDICATES GRADE AT BASE OF WALL INDICATES CENTERLINE INDICATES CONSTRUCTION NOTE INDICATES HANDICAP PARKING SPACE INDICATES RETAINING WALL INDICATES TRACT BOUNDARY/PROPERTY LINE INDICATES GRADING & PERMIT LIMITS
	□ICV	IRRIGATION CONTROL VALVES		

# PUMP CONSTRUCTION NOTES

51 INSTALL 8' X 14' X 10' DEEP REINFORCED CONCRETE WET WELL PER PLAN ON SHEET C-14

52 INSTALL 7' X 14' X 5.5' DEEP RENFORCED CONCRETE VALVE VAULT PER PLAN ON

53 INSTALL 1 - 250HP VFD SUBMERSIBLE PUMP#1 (PART #2) WITH A DESIGN PUMPING -RATE = 4,556 GPM AT A TOTAL DYNAMIC HEAD (TDH) = 142 FEET AND CAPABLE OF

-PASSING 3 INCH DIAMETER SOLIDS: 54 INSTALL 2 - 150HP VFD SUBMERSIBLE PUMPS #2 AND #3 (PART #4) WITH A DESIGN PUMPING RATE = 2,087 GPM AT A TDH = 144 FEET AND CAPABLE OF PASSING 3 INCI

DIAMETER SOLIDS INSTALL 1 - 15HP 60Hz SUBMERSIBLE PUMP #4 (PART #7) WITH A DESIGN PUMPING

**OWNER** 

DESCRIPTION

RATE = 59 GPM AT A TDH = 201 FEET INSTALL ALL PIPE AND FITTINGS PER SIZE AND DIAMETER PROVIDED IN PARTS LIST

LOCATED ON SHEET C-19 AND IN THE SPECIFICATIONS

# **DEMOLITION NOTES**

### DESCRIPTION

- CUT, CAP AND REMOVE ALL INDICATED EXISTING UTILITIES FROM THE SITE AND DISPOSE OF PROPERLY. PATCH CONCRETE AS REQUIRED
- REMOVE EXISTING RIPRAP AS REQUIRED FOR PROPOSED GRADING PLAN PER
- SHEET C-14 REMOVE EXISTING PLANTS
- REMOVE PORTION OF EXISTING CONCRETE DITCH AS REQUIRED FOR PROPOSED GRADING PLAN PER SHEET C-14
- CLEAR AND GRUB TO LIMITS AS SHOWN
- NOT USED EXISTING PUMPS TO BE RETURNED TO CITY
- ICE PLANT AND NON-NATIVES TO BE REMOVED
- 10 REMOVE AC DEBRIS, CRUSH AND SPREAD ON PARKING AREAS 11 ABANDON VALVE
- 12 REMOVE EXISTING CHAIN LINK FENCE 13 SAWCUT EXISTING CONCRETE: CUT, CAP AND REMOVE EXISTING 10" DIP. SEE DETAIL ON SHEET C-42
- 14 REMOVE AND REPLACE CHAIN LINK FENCE
- 15 NOT USED 16 NOT USED
- 17 REMOVE TELEPHONE POLES PRIOR TO GRADING AND RESTORE TO ORIGINAL
- POSITION UPON COMPLETION OF GRADING 18 SAWCUT AND REMOVE APPROXIMATELY 15 LF' OF EXISTING CURB
- 19 REMOVE FENCE AND GATE
- 20 REMOVE EXISTING AC 21 REMOVE IRRIGATION SYSTEM AS REQUIRED

# CONSTRUCTION NOTES

### DESCRIPTION

- CONSTRUCT 3-1/2" P.C.C. OVER 4" C.M.B. ACCESS ROAD, ENTRANCE WALKWAY
- AND/OR VIEW AREA (ADA AREA) PER DETAIL ON SHEET C-37 CONSTRUCT WINGWALLS PER CALTRANS STD. D90 TYPE A PER DETAILS ON
- SHEET C-43, C-44, C-45, C-46, AND/OR C-47 CONSTRUCT RIPRAP PER DETAILS ON SHEET C-39 AND C-40
- INSTALL PET WASTE BAG DISPENSER AND TRASH RECEPTACLE PER SPECIFICATIONS
- CONSTRUCT VEGETATED SWALE PER DETAIL ON SHEET C-39
- INSTALL SPEED BUMP PER CITY OF TORRANCE RECOMMENDATION
- SEE IRRIGATION PLANS (L1-L5) FOR CONNECTION
- 8 CONSTRUCT NEW RHING GATE TO REPLACE EXISTING VEHICLE GATE AT THE PARKING LOT PER DETAIL ON SHEET C-39
- 9 CONSTRUCT DIRT TRAIL (NON ADA), WIDTH PER PLAN, AND PER DETAIL ON SHT
- 10 CONSTRUCT EARTHEN CHANNEL PER DETAILS ON SHEET C-39
- INSTALL TIMBER BRIDGE PER DETAILS ON SHEET C-38 CONSTRUCT 4' X 32' TRENCH DRAIN AND INSTALL GRATE COVER - GRATING
- PACIFIC OR APPROVED EQUAL, PER DETAIL ON SHEET C-37 13 INSTALL REINFORCED CONCRETE DOUBLE BOX CULVERT PER CALTRANS STD.
- D81 AND DETAILS ON SHEET C-24
- 14 CONSTRUCT V-DITCH (W=4') PER DETAIL ON SHEET C-39 CONSTRUCT CONCRETE STEPS PER DETAIL ON SHEET C-40
- 16 CONSTRUCT MASONRY RETAINING WALL PER SPPWC 618-3. SEE PROFILE ON
- 17 INSTALL PAVERS PER DETAIL 'F' ON SHEET C-40
- 18 INSTALL (2) 10" D.I.P. FORCE MAINS AND BACKFILL PER CITY OF TORRANCE STD. NO. T-701 (ALL RESTRAINED JOINTS)
- 19 PROVIDE 4" WIDE CURB CUT WITH 1' WIDE BACKING NO. 2 SLOPE PROTECTION 20 INSTALL WATER QUALITY MONITORING STATION PER DETAILS ON SHEET C-42
- 22 EXISTING V-GUTTER TO BE REMOVED AND REPLACED IN KIND 23 CONSTRUCT CONCRETE ENCASEMENT OVER FORCE MAIN ELBOWS WITH ALL
- RESTRAINED JOINTS 24 STRUCTURAL CRACK REPAIR BY EPOXY INJECTION (ACI RAP-1) ON CONCRETE
- SLOPE LINER PER ASTM C 881
- 25 CUT 20' WIDE OPENING IN EXISTING BLOCK WALL FOR VIEWING: PROTECT EXISTING FOOTING
- CONSTRUCT WROUGHT IRON FENCE PER DETAIL ON SHEET L-8 CONSTRUCT 15'x15' 4" P.C.C. PAD
- INSTALL HDPE CORRUGATED DOUBLE WALL PIPE
- CONSTRUCT CONCRETE COLLAR PER SPPWC 380-4
- 30 INSTALL DIRECT ACTING PRESSURE REDUCING VALVES INSTALL METAL HAND RAIL PER DETAIL ON SHEET C-39
- CONSTRUCT WINGWALLS PER CALTRANS STD D84 TYPE A
- 33 INSTALL APPROXIMATELY 11 LF OF WROUGHT IRON FENCE PER DETAIL 'F' ON SHEET C-40 34. REMOVE AND REPLACE CHAIN LINK FENCE PER SPECIFICATIONS (H=8')
- 35 CONSTRUCT WINGWALLS PER CALTRANS STD. D86A
- 36 INSTALL 4" REMOVABLE BOLLARDS CAL PIPE SECURITY BOLLARD MODEL IBP 4040 OR
- 37 INSTALL DRIVE GATE AND WALK GATE PER SPPWC STD, 600-3 AND DETAIL 'G' SHT C-40 38 INSTALL GALVANIZED STEEL RAILING PER DETAIL ON SHEET C-40
- 39 INSTALL COMPACTED BACKFILL WITH 3" C.M.B. COVER 40 INSTALL VIEWING BENCH AND RECOGNITION/INFORMATION SIGN PER DETAIL ON SHT L-7
- 41 CONSTRUCT KEYSTONE GRAVITY WALL, SEE SECTION A3-A3 ON SHEET C-25 42 CONSTRUCT 6" CURB PER SPPWC STD. 120-2, TYPE A1-6
- 43 CLEAR ALL VEGETATION ON BLOCK WALL (10' EACH SIDE OF OPENING), PER SPECS 44 CONSTRUCT REINFORCED CONCRETE RETAINING WALL PER SPPWC 615-4. SEE PROFILE
- 45 CONSTRUCT 4" C.M.B. ACCESS ROAD/TRAIL (NON ADA) PER DETAIL ON SHEET C-37 46 INSTALL 14" D.I.P. FORCE MAIN AND BACKFILL PER CITY OF TORRANCE STD. NO. T-701
- 47 INSTALL 14" CL 150 D.I.P. PIPE SPOOL LENGTH TO BE DETERMINED PER FIELD

CITY OF TORRANCE

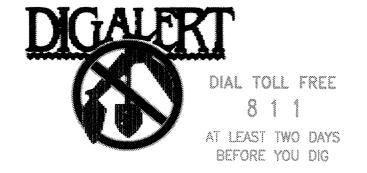
- 48 INSTALL FLEX-A-MAT TIED CONCRETE BLOCK MAT (OR APPROVED EQUAL) EROSION
- CONTROL PER DETAIL ON SHEET C-39
- 49 INSTALL CONCRETE HEADER 4" WIDE X 6" DEEP, ON GRADE
- 50 INSTALL 4" PVC IRRIGATION PIPE

# PROPERTY LOCATION, LEGAL DESCRIPTION, LEGEND, SHEET INDEX: C-1

BY CHECKED

# IMPORTANT NOTICE

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIGALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIGALERT TOLL FREE 811 TWO WORKING DAYS BEFORE YOU DIG.



UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

DPH STANDARD NOTES

PREPARED BY:

RW-6

111

1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX www.cwecorp.com

CITY OF TORRANCE

ROBERT BESTE, PUBLIC WORKS DIRECTOR

REV. DATE

PUBLIC WORKS DEPARTMENT

20500 MADRONA AVENUE

TORRANCE, CA 90503

(310) 781-6900 - PHONE

PUBLIC WORKS DEPARTMENT 1 | 12/11/13 AMIE PUMP STATION UPGRADES OMITTED No. 59226 Exp. 06/30/13 /\* DRAWN: ALF DESIGNED: C.P. TOWATC J. SEMAAN ACTING CITY ENGINEER ENGINEER: VIKRAM BAPNA R.C.E. NO. 59226 EXP. 06/30/13 SCALE: AS SHOWN SHEET 2 OF 111 DIVISION JOHN DETTLE PLAN NO. SD - 500

# **GENERAL NOTES**

- 1. ALL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS. WORK NOT COVERED BY THE PROJECT SPECIFICATIONS SHALL CONFORM TO THE FOLLOWING LATEST EDITION AND SUPPLEMENTS BELOW:
- A. "THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK).B. TORRANCE MUNICIPAL CODE (TMC), THE PROJECT SOILS REPORT / SPECIAL REQUIREMENTS OF THE PERMIT.
- C. WEST BASIN MUNICIPAL WATER DISTRICT (WBMWD) SPECIFICATIONS AND STANDARD DRAWINGS.
- 3. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE DURING THE CONSTRUCTION PERIOD.
- 4. WORK HOURS ARE LIMITED FROM 7:30 AM TO 6:00 PM MONDAY THROUGH FRIDAY; 9:00 AM TO 5:00 PM SATURDAYS; AND NO WORK ON SUNDAYS AND HOLIDAYS OBSERVED BY THE HALL. NOISE, EXCAVATION, DELIVERY AND REMOVAL SHALL BE CONTROLLED PER SECTION 46.3.1 OF THE TMC.
- 5. THE STAMPED SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AT ALL TIMES.
- 6. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING UTILITIES.

2. DUST SHALL BE CONTROLLED BY WATERING AND/OR DUST PALLIATIVE.

- 7. APPROVED DRAINAGE PROVISIONS AND PROTECTIVE MEASURES MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING OPERATION.
- 8. HAUL ROUTES FOR IMPORT OR EXPORT OF MATERIALS SHALL BE APPROVED BY THE CITY OF TORRANCE AND CONFORM TO SECTION 61.9.2 OF THE TMC.
- 9. POSITIVE DRAINAGE SHALL BE MAINTAINED AWAY FROM ALL BUILDING AND SLOPE AREAS.
- 10. NO PAINT, PLASTER, CEMENT, SOIL, MORTAR OR OTHER RESIDUE SHALL BE ALLOWED TO ENTER STREETS, CURBS, GUTTERS OR STORM DRAINS. ALL MATERIAL AND WASTE SHALL BE REMOVED FROM THE SITE.
- 11. CONSTRUCTION SITE MUST BE FENCED AND SECURE AT ALL TIMES AND SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

# NOTICE TO CONTRACTOR(S)

- 1. PLANS ARE NOT TO BE UTILIZED UNLESS STAMPED "APPROVED" BY THE ENGINEER OF RECORD.
- 2. CONTRACTOR SHALL PROVIDE TIMELY NOTIFICATION TO THE ENGINEER OF RECORD OF ANY POTENTIAL OR ACTUAL DISCREPANCIES BETWEEN CIVIL PLANS AND OTHER PLANS/ACTUAL FIELD CONDITIONS.
- 3. CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF PLANS IN THE FIELD. PLANS SHALL BE MARKED UP TO REFLECT ACTUAL OR AS-BUILT CONDITIONS. PLANS SHALL BE KEPT CURRENT. CONTRACTOR SHALL ALSO MAINTAIN ALL NECESSARY STANDARD PLANS AND SPECIFICATIONS IN THE FIELD.
- 4. QUANTITIES PROVIDED HEREIN ARE ENGINEER'S ESTIMATES FOR PERMITTING OR BONDING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING. CONTRACTOR SHALL PERFORM ITS OWN CONSTRUCTION TAKEOFFS.
- 5. NOT ALL UTILITIES MAY BE SHOWN, CONTRACTOR SHALL FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL AFFECTED UTILITIES. PROTECT IN PLACE, RELOCATE, OR REPLACE AS NECESSARY. PROVIDE TEMPORARY UTILITY SERVICES AS NECESSARY.
- 6. WHERE EXISTING WATER SERVICES OR SEWER LATERALS ARE TO BE UTILIZED, CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND FUNCTIONALITY OF SUCH SERVICES OR LATERALS.
- 7. ELEVATIONS INDICATED MAY HAVE BEEN INTERPOLATED FROM EXISTING TOPOGRAPHIC OR RECORD MAPS, CONTRACTOR SHALL FIELD VERIFY ELEVATIONS AND LOCATIONS WHERE PROPOSED IMPROVEMENTS JOIN EXISTING.
- 8. ROUGH GRADE, FINISH GRADE, AND AS-BUILT CERTIFICATIONS SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- 9. UTILITIES PLANS ARE INTENDED TO SHOW ALIGNMENT ONLY, EXACT POSITIONS OF DEVICES INCLUDING BUT NOT LIMITED TO METERS, BACKFLOWS, DETECTOR CHECKS, FIRE DEPARTMENT CONNECTIONS, POST INDICATOR VALVES, SPRINKLER RISERS, AND HYDRANTS SHALL BE FIELD-DETERMINED AFTER CROSS CHECKING CIVIL PLANS AGAINST ARCHITECTURAL, PLUMBING, SPRINKLER, AND OTHER APPLICABLE PLANS.
- 10. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, INSTALLATION DRAWINGS, CATALOG CUT-SHEETS, PRODUCT SPECIFICATIONS, AND OTHER APPLICABLE SUBMITTALS, IN A TIMELY MANNER, TO THE ENGINEER FOR APPROVAL.
- 11. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. APPROVAL OF THESE PLANS BY THE CITY OF TORRANCE DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NON-EXISTENCE OF ANY UTILITY AND/OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL DUE PRECAUTIONARY MEANS TO PROTECT THE UTILITIES OF RECORD OR NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- 12. THE GRADING CONTRACTOR SHALL VERIFY THE PRECISE GRADING QUANTITY AS SHOWN ON THIS PLAN AS PART OF HIS BID.
- 13. IT IS REQUESTED THAT THE GRADING CONTRACTOR NOTIFY THE ENGINEER OF RECORD BY CALLING AT LEAST 48 HOURS BEFORE COMPLETION OF THE GRADING OPERATION IN ORDER THAT HE/SHE MAY PERFORM A FINAL INSPECTION TO COMPLY WITH THE GRADE CERTIFICATION COMMITMENT TO THE CITY OF TORRANCE PER TMC SECTION 81.2.56.
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.
- 15. UNAUTHORIZED CHANGES AND USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY OF TORRANCE.

# NOTICE TO CONTRACTOR(S)

- SPECIFICATIONS: ALL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS. WORK NOT COVERED BY THE PROJECT SPECIFICATIONS SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF THE GREEN BOOK AND WBMWD SPECIFICATIONS AND STANDARD DRAWINGS.
- 2. INSPECTION: ALL WORK AND MATERIALS ARE SUBJECT TO INSPECTION PURSUANT TO SECTION 2-11 OF THE GREEN BOOK
- UNDERGROUND SERVICE ALERT: BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT (USA) INQUIRY I.D. NUMBER BY CALLING 8 1 1. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE CONTRACTOR STARTS THE EXCAVATION WORK SO THAT UTILITY OWNERS CAN BE NOTIFIED. IF THE UTILITY OWNER IS THE CITY OF TORRANCE, A CONFIRMATION NUMBER INDICATING THE CITY HAS BEEN NOTIFIED SHALL BE OBTAINED BY USA AND/OR THE CONTRACTOR FROM THE APPROPRIATE CITY DEPARTMENT. THE I.D. NUMBER TOGETHER WITH THE DATE ACQUIRED SHALL BE REPORTED TO THE BUREAU OF CONTRACT ADMINISTRATION WHEN CALLING FOR INSPECTION I.D. NUMBERS WILL NOT BE GIVEN MORE THAN 10 DAYS BEFORE STARTING EXCAVATION WORK.
- 4. AT LEAST THIRTY (30) DAYS BEFORE THE START OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT THE CITY AT (310) 781-6900 TO VERIFY THAT THERE IS NO PROPOSED PROJECT IN THIS AREA.
- 5. NOTIFICATION: AT LEAST TEN (10) DAYS BEFORE THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY, IN WRITING, ABUTTING PROPERTY OCCUPANTS OF THE PROPOSED CONSTRUCTION START DATE. A COPY OF SAID WRITTEN NOTIFICATION SHALL BE PROVIDED TO THE INSPECTOR FOR APPROVAL BEFORE THEY ARE DISTRIBUTED TO THE OCCUPANTS OF THE ABUTTING PROPERTY.
- 6. TRAFFIC CONTROL PLANS PREPARED BY CONTRACTOR SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FACILITIES.

### ADVANCE CONSTRUCTION NOTICE SIGNS:

- 8. IN ADDITION TO SIGNS REQUIRED BY THE CITY TRAFFIC ENGINEER, FURNISH AND PLACE SIGNS FOR GIVING ADVANCE NOTICE TO MOTORISTS OF TRAFFIC DISRUPTION AS PART OF THIS PROJECT IN ACCORDANCE WITH CITY STANDARD PLANS. THE INFORMATION, TIME AND TYPE I CREDIT SIGNS ARE ALSO REQUIRED AND SHALL BE PER CITY STANDARD PLANS.
- CITY OF TORRANCE SHALL BE POSTED TO ACKNOWLEDGE THE SOURCE OF FUNDS PURSUANT TO THE GRANT GUIDELINES AND APPLICATION (APPLICATION GUIDELINES). SIZE, LOCATION, AND NUMBER OF SIGNS SHALL BE DETERMINED BY THE STATE. REQUIRED SIGNAGE MUST BE IN PLACE BEFORE GRANT FUNDS FOR CONSTRUCTION WILL BE RELEASED.
- 10. THE CONTRACTOR SHALL VERIFY ALL DIMENSION AND CONDITIONS IN THE FIELD PRIOR TO STARTING ANY WORK.
- THE ENGINEER DOES NOT WARRANT THE ACCURACY OF SCALED DIMENSION ON ANY PLAN. ALL DIMENSIONS SHALL BE AS DESIGNATED ON THE PLAN.
- 12. IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL RIGHTS TO USE PROPERTIES OUTSIDE THE CITY'S RIGHT-OF-WAY WHICH THE CONTRACTOR DEEMS NECESSARY TO PERFORM ANY OF THE WORK UNDER THIS CONTRACT. ALL PRIVATE RIGHTS SHALL BE OBTAINED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
- 13. THE CONTRACTOR SHALL PROTECT ALL PUBLIC AND PRIVATE PROPERTY DURING THE PERFORMANCE OF WORK DONE UNDER THIS CONTRACT. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTION TO AVOID ANY DAMAGE TO ANY STRUCTURES OR FEATURES ADJACENT TO THE CONSTRUCTION LIMITS, THE CONTRACTOR SHALL ALSO PROVIDE FOR THE PROTECTION OF THE PEDESTRIANS.
- 14. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM THE BUILDING OFFICIAL PRIOR TO COMMENCING ANY GRADING OR EXCAVATIONS.
- 15. SELECTIVE REMOVALS:
- A. REMOVE EXISTING IMPROVEMENTS THAT INTERFERE WITH THE CONSTRUCTION OF THIS PROJECT, AND NO MORE THAN IS INDICATED IN THE DEMOLITION PLAN.
- B. ALL REMOVALS OR RELOCATIONS OF EXISTING UTILITIES SHALL BE COORDINATED WITH THE OWNER OF SAID UTILITY. NO REMOVALS OR RELOCATIONS OF EXISTING UTILITIES SHALL COMMENCE PRIOR TO APPROVAL OF SAID UTILITY.
- 16. REPAIR AND/OR REPLACE ANY EXISTING BROKEN OR OFF-GRADE PAVEMENT, CONCRETE CURB, GUTTER OR SIDEWALK IMMEDIATELY ADJACENT TO OR WITHIN THE AREA OF THIS IMPROVEMENT SATISFACTORY TO THE CITY ENGINEER.
- 17. SURVEY MONUMENT PRESERVATION IS REQUIRED AND SHALL INCLUDE SUBMITTAL OF PRE AND POST CONSTRUCTION SURVEY MONUMENT TIES TO THE ENGINEER.
- 18. CUTS OR EXCAVATIONS IN STREETS THAT HAVE BEEN RESURFACED ONE YEAR OR LESS FROM THE DATE OF A PROPOSED CUT OR EXCAVATION ARE PROHIBITED UNLESS THE PERMITTEE RESURFACES THE ENTIRE BLOCK OR INTERSECTION WITHIN WHICH SUCH CUT OR EXCAVATION OCCURS.

# UNSTABLE SUBSTANCE :

19. THE CONTRACTOR SHALL POTHOLE EXISTING SURFACE INSTALLATIONS CARRYING UNSTABLE SUBSTANCES TO DETERMINE THEIR LOCATIONS AND ELEVATIONS PRIOR TO COMMENCING EXCAVATION. (NO POWER TOOL PERMITTED, EXCEPT TO BREAK PAVEMENT).

- 20. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH ALL UTILITY COMPANIES RESPONSIBLE FOR WORK TO BE PERFORMED NEAR THEIR RESPECTIVE FACILITIES. IN THE EVENT THAT THE CONTRACTOR'S OPERATION REQUIRES UTILITY RELOCATION IN ADDITION TO THAT SPECIFIED ON THE PLAN, SUCH ADDITIONAL WORK SHALL BE AT CONTRACTOR'S EXPENSE.
- 21. ALL CONCRETE AND SOIL NOT UTILIZED IN CONSTRUCTION WILL BE DISPOSED OF IN ACCORDANCE WITH THE APPLICABLE JURISDICTION REGULATION.

### STORM DRAIN CONSTRUCTION NOTES:

- 22. NO CONSTRUCTION DEBRIS WILL BE ALLOWED TO FALL IN TO THE CATCH BASIN OR STORMDRAIN, IF ANY MATERIAL IS INADVERTENTLY INTRODUCED, THEN IT WILL BE REMOVED IMMEDIATELY.
- 23. THE CONTRACTOR SHALL VERIFY THE ELEVATION OF ANY SUBSTRUCTURE INDICATED WITH AN ASTERISK (\*) AND SHALL SECURE CLEARANCE OF THE ENGINEER OF RECORD BEFORE PROCEEDING WITH INSTALLATION OF THE PIPE.

### TREE REMOVAL AND ROOT TRIMMING:

24. ROOT TRIMMING: TREE(S) MUST BE TRIMMED PRIOR TO ROOT PRUNING TO COMPENSATE FOR THE ROOT LOSS AND TO STABILIZE THE TREE. THE CROWN OF THE TREE IS TO BE REDUCED BY NO MORE THAN 25% OF FOLIAGE (UNLESS APPROVED OTHERWISE BY AN URBAN FORESTRY ARBORIST). PRUNE THE ROOTS ON ONE SIDE OF THE ROOT SYSTEM ONLY (UNLESS APPROVED OTHERWISE BY AN URBAN FORESTRY ARBORIST). DO NOT PRUNE ROOTS LARGER THAN 4" DIAMETER (PERMIT IS REQUIRED).

CONTRACTOR IS TO TRIM THE TREE(S) TO THE SATISFACTION OF THE CITY NATURALIST (PERMIT IS REQUIRED).

NOTIFY CITY NATURALIST AT (310) 782-3989, FIVE WORKING DAYS PRIOR TO TRIMMING AND/OR ROOT PRUNING FOR A REPRESENTATIVE TO INSPECT AND ISSUE THE NECESSARY PERMITS.

### LAY DOWN AREA:

- 25. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND PAY FOR ALL NECESSARY CONSTRUCTION LAYDOWN AREAS.
- 26. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITIES OF RENTING OPERATING EQUIPMENTS.
- 7. ALL REPAIRS TO CONSTRUCTION LAYDOWN AREAS AND TEMPORARY IMPROVEMENTS SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR AND/OR AN AUTHORIZED REPRESENTATIVE OF THE PROPERTY OWNER PER REQUEST.
- 28. THE CONTRACTOR SHALL REMOVE, REGRADE AND, WHEN NECESSARY, BACKFILL TO RESTORE THE CONSTRUCTION LAY DOWN ACCESS AND TEMPORARY IMPROVEMENTS TO ITS ORIGINAL/FORMER CONDITION AT THE COMPLETION OF THE WORK.
- 29. THE CONTRACTOR SHALL BACKFILL EXCAVATED AREAS WITH ENGINEERED FILL UP TO THE ORIGINAL GRADE, UNLESS OTHERWISE SPECIFIED OR INDICATED ON THESE PLANS.

### TRAFFIC CONTROL NOTES:

- 30. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES; OTHERWISE, MAINTAIN ONE LANE OF TRAFFIC WITH FLAG CONTROL FROM 9AM TO 4PM WEEKDAYS. MAINTAIN LOCAL AND EMERGENCY ACCESS AT ALL TIMES.
- 31. THE CONTRACTOR SHALL NOTIFY CITY TRAFFIC ENGINEER AT (310) 781-6900, FOUR (4) WORK DAYS PRIOR TO THE START OF CONSTRUCTION FOR THE POSTING OF TEMPORARY "TOW AWAY NO STOPPING" SIGNS AS NEEDED.
- THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE RESTORATION OF ALL OBLITERATED STRIPING AND PAVEMENT MARKINGS AND FOR THE REINSTALLATION OF ALL OTHER MISSING OR DAMAGED TRAFFIC CONTROL DEVICES (I.E., SIGNS, CURB MARKINGS, STAMPED CROSSWALKS, PARKING METERS, ETC.). WHEN NECESSARY, ADDITIONAL RELATED TRAFFIC CONTROL DEVICES, INCLUDING, BUT NOT LIMITED TO, DETOUR/CONSTRUCTION WORKSITE TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN SUPPORT OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO PHYSICALLY INSTALL THESE TRAFFIC CONTROL DEVICES TO THE FULL SATISFACTION OF THE CITY TRAFFIC ENGINEER. THE ENTIRE COST THEREOF SHALL BE BORNE BY THE CONTRACTOR (UNLESS PAYMENT BY THE CITY IS PRE-APPROVED BY A CITY AGENCY). ALL STRIPING AND PAVEMENT MARKINGS SHALL BE INSTALLED UTILIZING THERMOPLASTIC MATERIALS PER CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL CONTACT THE CITY AT (310) 781-6900 FIVE (5) WORKING DAYS PRIOR TO COMMENCING ANY WORK THAT REQUIRES TRAFFIC CONTROL DEVICE MAINTENANCE.
- 33. FOR QUESTIONS REGARDING TRAFFIC LANE REQUIREMENTS, PLEASE CALL THE CITY TRAFFIC ENGINEER AT (310)

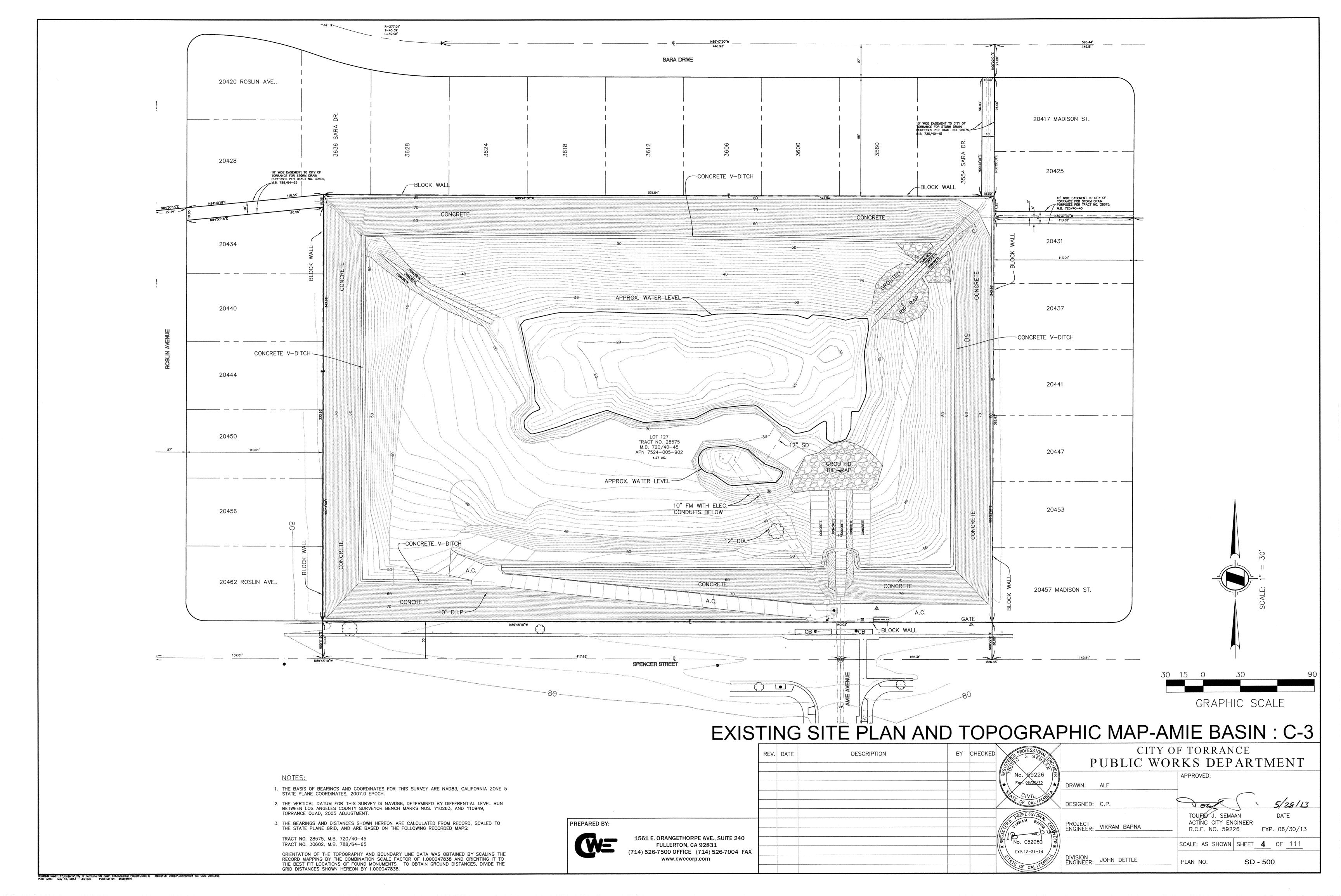
GENERAL NOTES: C-2

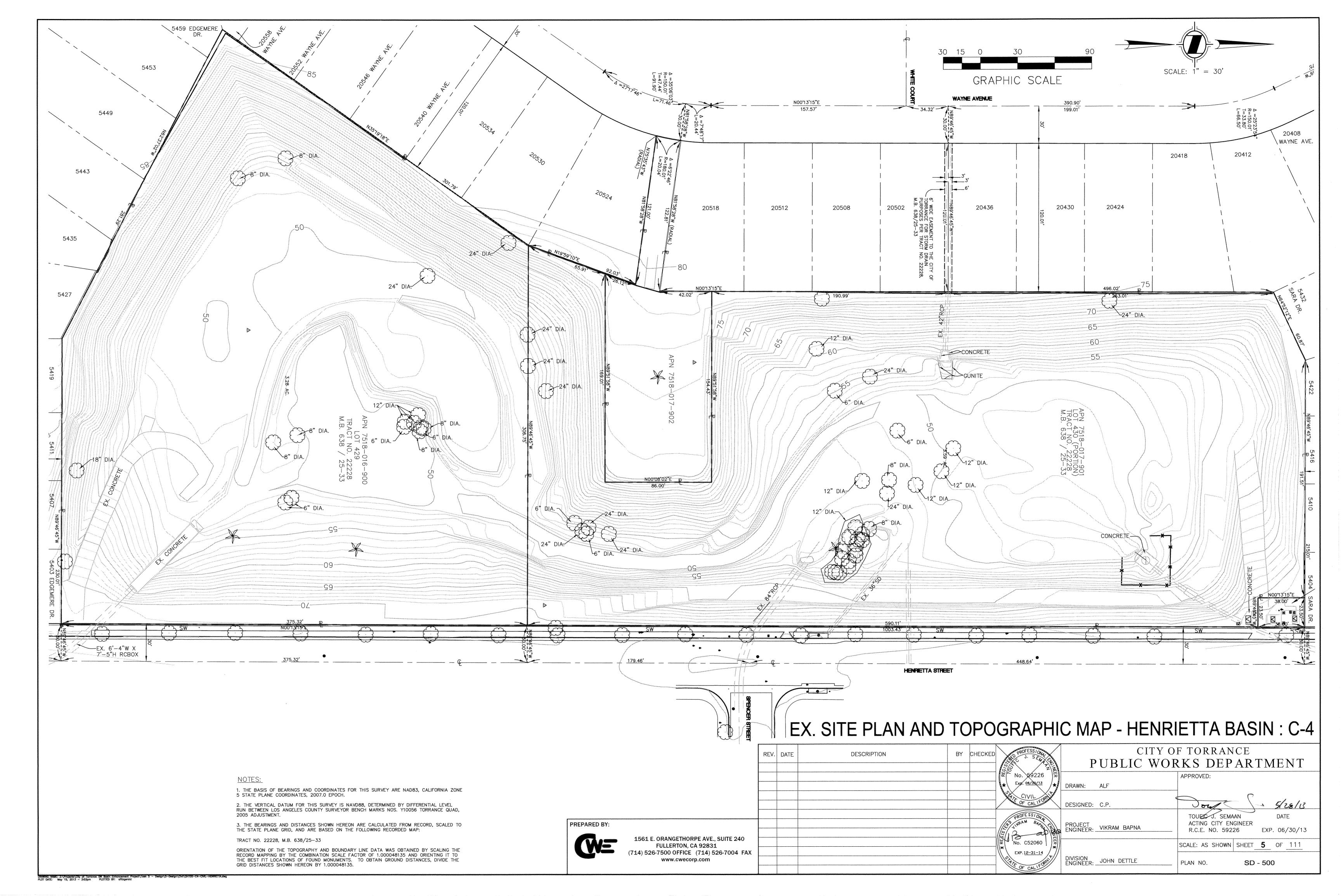
CITY OF TORRANCE REV. DATE BY CHECKED DESCRIPTION PUBLIC WORKS DEPARTMENT No. \$9226 APPROVED: Exp. 06/30/13 DRAWN: ALF DESIGNED: C.P. TOUE/C J. SEMAAN DATE ACTING CITY ENGINEER ENGINEER: VIKRAM BAPNA R.C.E. NO. 59226 EXP. 06/30/13 No. C52060 SCALE: AS SHOWN SHEET 3 OF 111 EXP. 12-31-14 DIVISION JOHN DETTLE PLAN NO. SD - 500

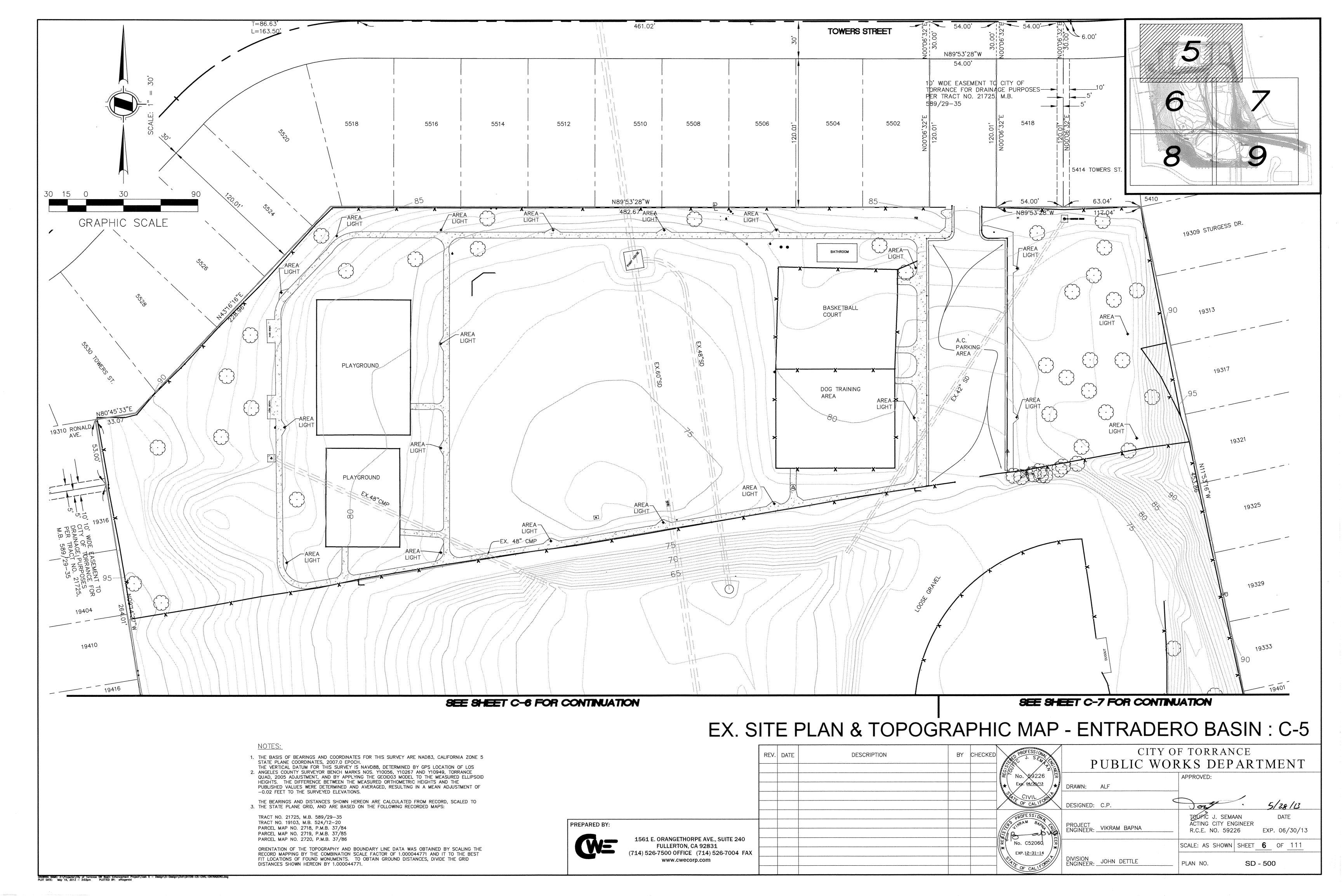
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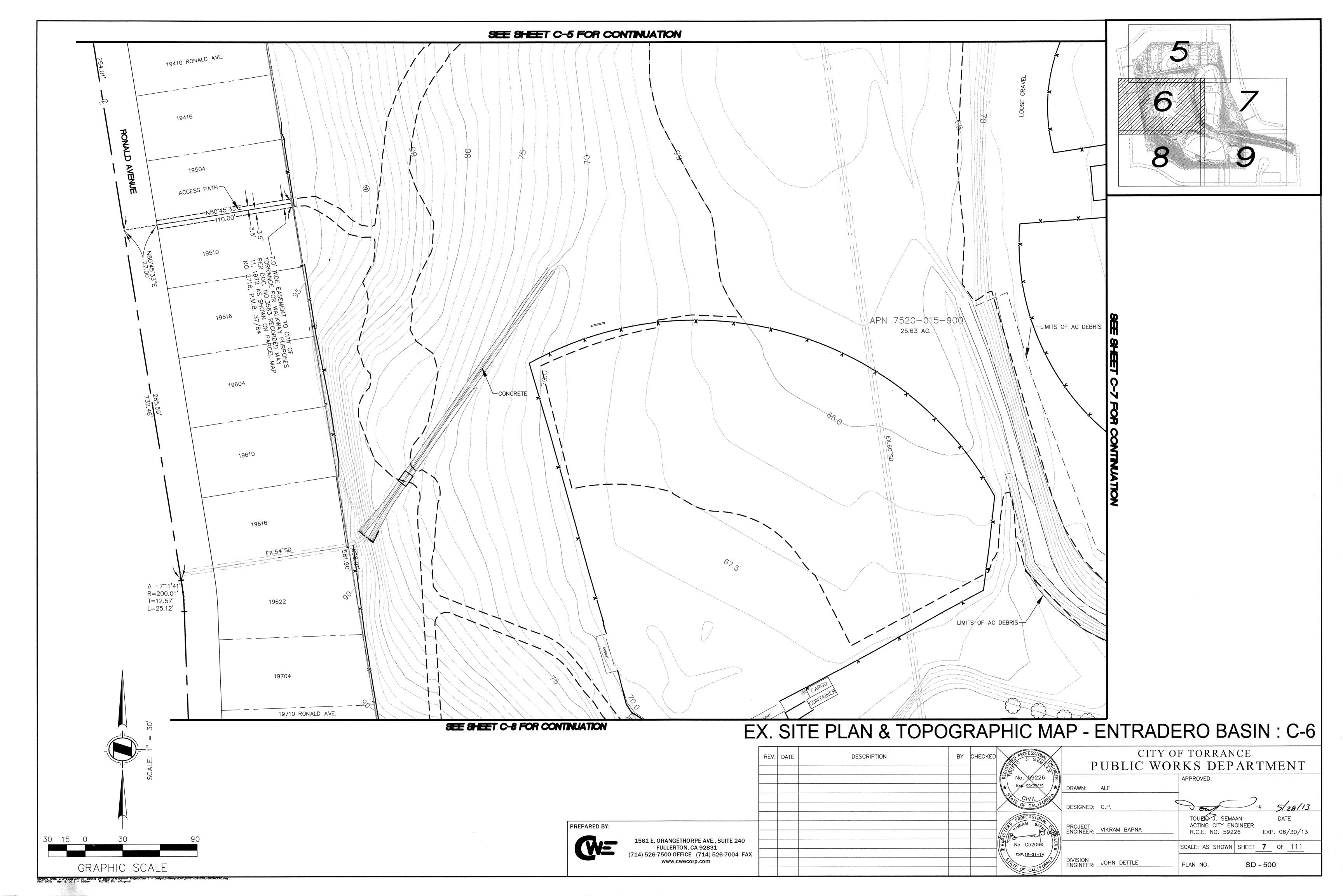
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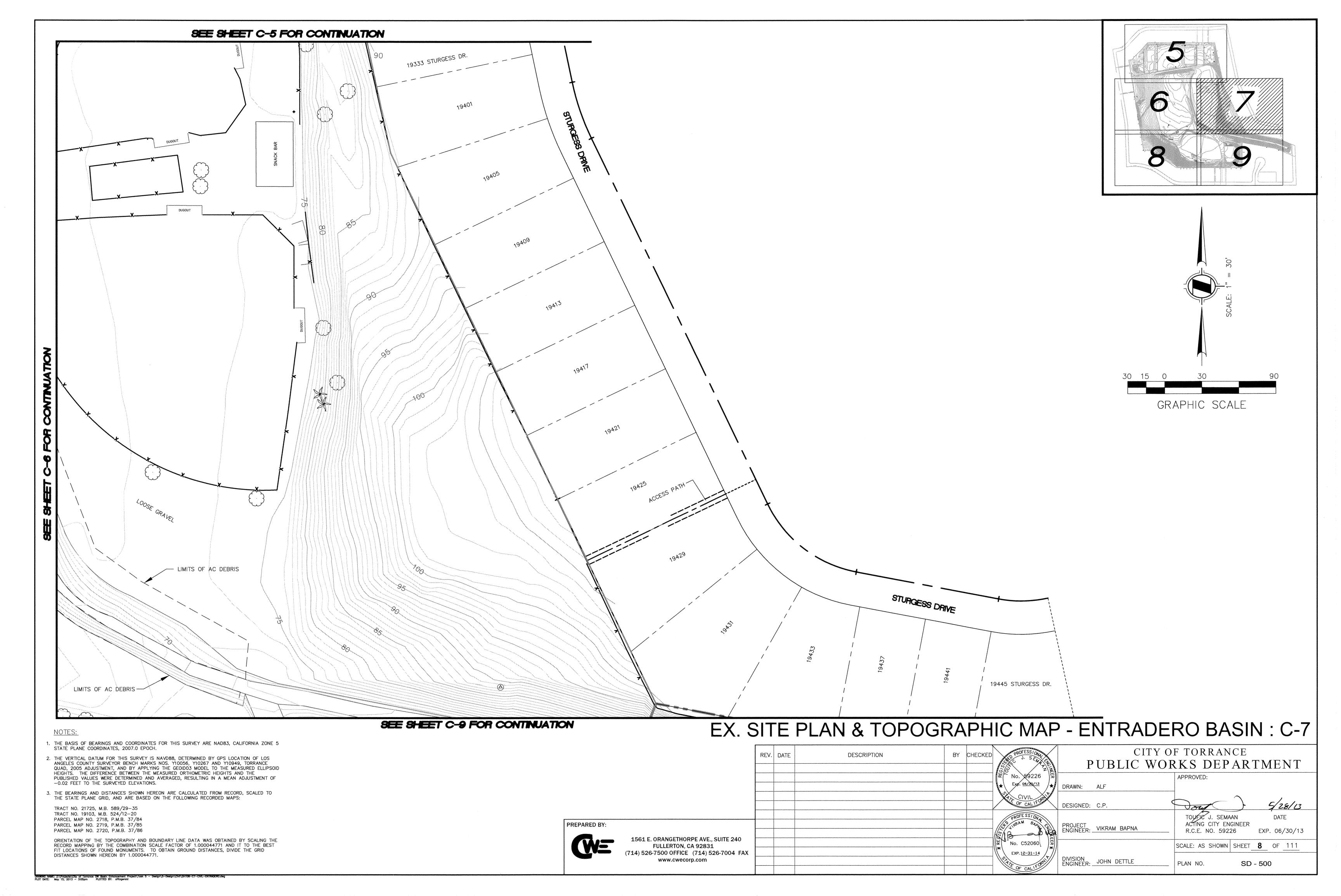
1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX www.cwecorp.com

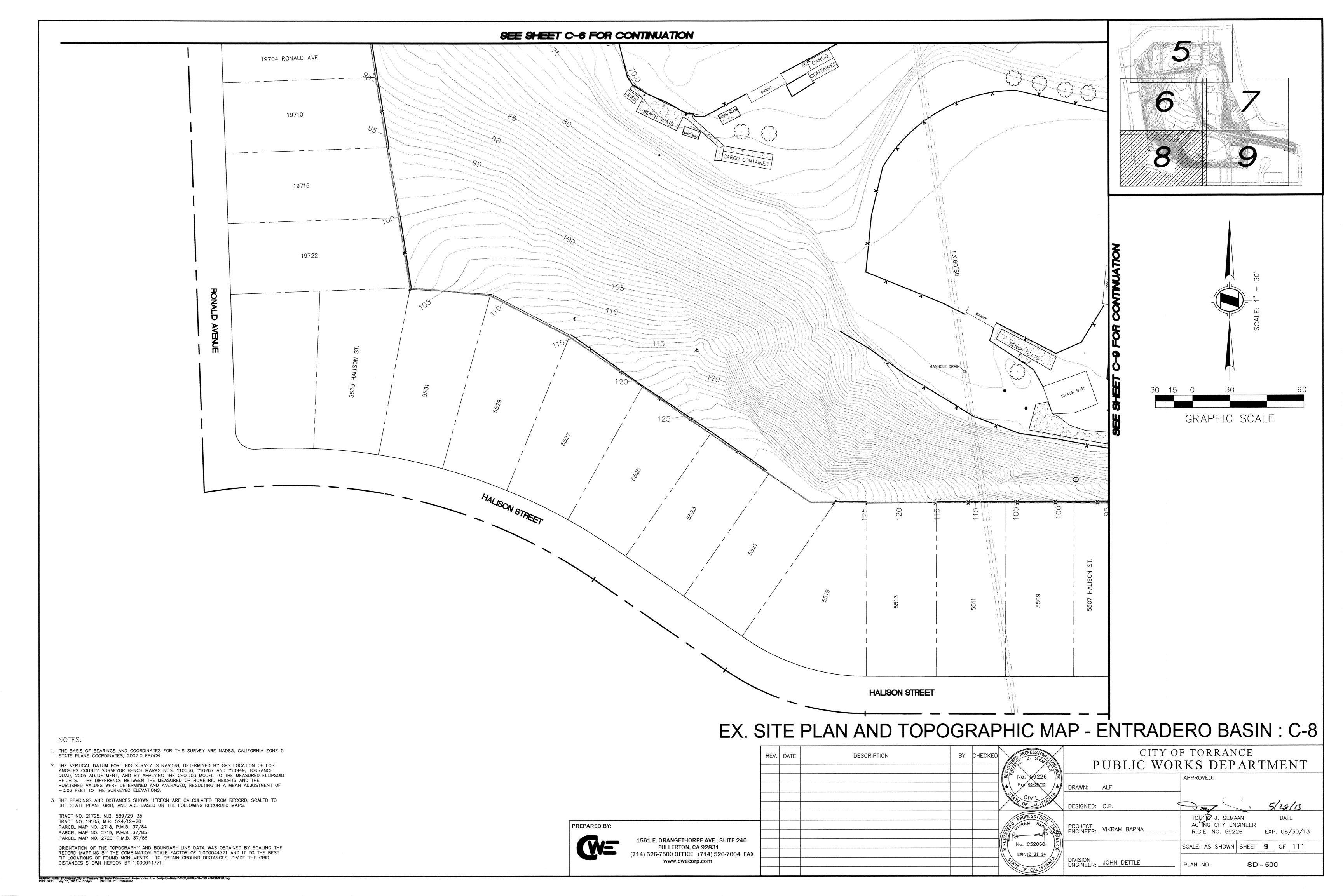


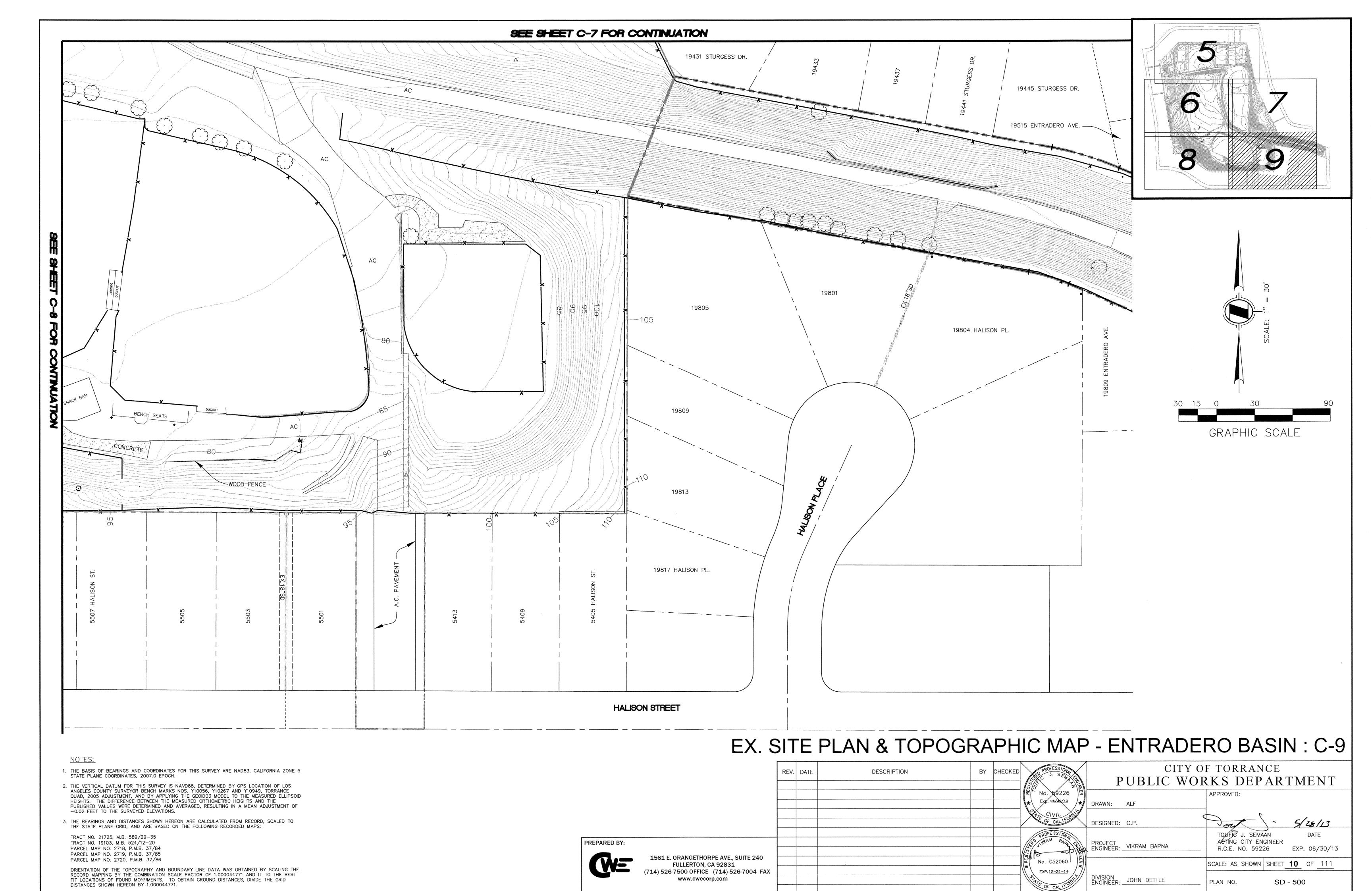












# **GRADING NOTES**

- 1. SPECIFICATIONS SHALL HAVE PRECEDENCE OVER DRAWINGS.
- 2. THE STAMPED SET OF PLANS SHALL BE ON THE JOB SITE AT ALL TIMES.
- 3. ALL RECOMMENDATIONS AND CONDITIONS OF THE APPROVED SOILS AND/OR GEOLOGICAL REPORT, ALL ADDENDA, SHALL BE COMPLIED WITH, AND SHALL BE PART OF THE PLANS AND SHALL BE AT THE JOB SITE AT ALL TIMES.
- CONSULTANT SOILS AND GEOLOGY REPORT BY
  - CONSTRUCTION TESTING & ENGINEERING, INC. DATED MAY 18, 2011
  - 14538 MERIDIAN PKWY., SUITE A, RIVERSIDE, CA 92518
- 4. NO WORK SHALL BE STARTED IN OR ABOUT A GRADING PROJECT WITHOUT FIRST NOTIFYING THE GRADING INSPECTOR. SEC.91.108.9.1. 5.
- 5. NO GRADING WORK, INCLUDING IMPORT AND EXPORT, SHALL BE DONE BETWEEN THE HOURS OF 6:00 P.M. AND 7:00 A.M. ON ANY DAY AND NO WORK SHALL BE DONE ON SUNDAY AT ANY TIME, EXCEPT IN EMERGENCIES AS PROVIDED IN SECTION 91.7005.4 OF THE BUILDING CODE. A HAUL ROUTE SHALL BE PREPARED BY THE CONTRACTOR SATISFACTORY TO THE DEPARTMENT OF BUILDING SAFETY.
- 6. CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA SUFFICIENTLY DAMP TO CONTROL DUST CAUSED BY GRADING AND CONSTRUCTION. CONTRACTOR SHALL, AT ALL TIMES, PROVIDE REASONABLE CONTROL OF DUST CAUSED BY WIND.
- 7. IF THE GRADING JOB EXTENDS OVER A PERIOD OF TIME EXCEEDING SIX MONTHS, THE DEPARTMENT MAY REQUIRE PLANTING OF THOSE PORTIONS OF THE JOB WHERE ALL OTHER GRADING REQUIREMENTS HAVE BEEN MET IN ORDER TO PREVENT DUST AND
- 8. HIGHWAY EQUIPMENT SHALL BE KEPT IN GOOD OPERATING CONDITION AND MUFFLED AS REQUIRED BY LAW.
- 9. EXCEPT IN EMERGENCY CASES, THE REPAIR OF CONSTRUCTION EQUIPMENTS OR THE DELIVERY OF CONSTRUCTION MATERIALS IS NOT PERMITTED BEFORE 8:00 A.M. OR AFTER 6:00 P.M. ON SATURDAY NOR AT ANY TIME ON SUNDAY.
- 10. THE FILL MATERIALS IN EACH TRUCKLOAD SHALL BE KEPT LOW ENOUGH TO PREVENT SPILLAGE AND SHALL BE SUFFICIENTLY WET DOWN TO PREVENT DUST.
- 11. NO PERSON SHALL, WHEN HAULING ANY EARTH, SAND, GRAVEL, ROCK, STONE, DEBRIS, PAPER OR ANY OTHER SUBSTANCE OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE, ALLOW SUCH MATERIALS TO BLOW OR SPILL OVER AND UPON THE PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE OR ADJACENT PRIVATE PROPERTY.
- 12. NO PERSON SHALL, WHEN EXCAVATING, COMPACTING, HAULING OR MOVING EARTH, SAND, GRAVEL, ROCK, STONE, DEBRIS, OR ANY OTHER SIMILAR SUBSTANCE, CAUSE, ALLOW OR PERMIT SUCH MATERIALS TO DROP, BE DEPOSITED, OR FALL FROM THE BODY, TIRES, OR WHEELS OF ANY VEHICLE SO USED UPON ANY PUBLIC STREET OR ALLEY WITHOUT IMMEDIATELY AND
- 13. PERMISSION SHALL BE SECURED FROM THE DEPARTMENT OF PUBLIC WORKS IF THE TRUCKS ARE LOADED IN THE STREET.
- 14. THE LOADING OR DUMPING OF EXCESS SOIL SHALL BE APPROVED BY THE GRADING INSPECTOR PRIOR TO STARTING EXCAVATION.
- 15. BRUSHING AND SCARIFYING OF SLOPES SHALL PROCEED ONLY AS FAR AS PERIODICALLY CLEARED BY THE GRADING INSPECTOR.
- 16. PRIOR TO PLACING FILL, SLOPES SHALL BE PROPERLY PREPARED BY BRUSHING AND BENCHING.
- 17. LOOSE MATERIAL SHALL NOT EXCEED 3" IN DEPTH ON A GRADED SLOPE.

PERMANENTLY REMOVING THE SAME THERE FROM.

- 18. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE.
- 19. ALL LOOSE MATERIALS SHALL BE REMOVED OR COMPACTED PER APPROVED PLAN.
- 20. IF AT ANY STAGE OF WORK ON AN EXCAVATION OR FILL THE ENGINEER DETERMINES THAT FURTHER WORK AS AUTHORIZED BY AN EXISTING PERMIT IS LIKELY TO ENDANGER ANY PROPERTY OR PUBLIC WAY, THE ENGINEER MAY REQUIRE AS A CONDITION TO ALLOW THE WORK TO CONTINUE, THAT PLANS FOR SUCH WORK BE AMENDED TO INCLUDE ADEQUATE SAFETY PRECAUTIONS.
- 21. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE FROM THE BEGINNING TO COMPLETION OF GRADING OPERATIONS.
- 22. THE ENGINEERING GEOLOGIST, SOILS ENGINEER AND CIVIL ENGINEER SHALL COMPLY WITH RGA 5-67 AND SHALL PROVIDE THE DEPARTMENT WITH A GRADING CERTIFICATION UPON COMPLETION OF THE JOB.
- 23. AN AS-GRADED PLAN AT A SCALE OF I" = 40' (OR OTHER SCALES DEEMED APPROPRIATE BY THE DEPARTMENT) PREPARED BY THE CIVIL ENGINEER SHALL BE SUBMITTED WITH THE REQUIRED GRADING CERTIFICATIONS TO THE DEPARTMENT UPON JOB COMPLETION FOR ALL HILLSIDE TRACT GRADING AND GRADING WORK IN EXCESS OF 5,000 CU. YD. OF EITHER CUT OR FILL OR A COMBINATION THEREOF.
- 24. GRADING WHICH INVOLVES REMOVAL OF LATERAL SUPPORT OF PUBLIC WAYS REQUIRES DEPARTMENT OF PUBLIC WORKS
- 25. INSPECTIONS OF EXCAVATION AND FILLS. THE CONTRACTOR SHALL NOTIFY THE BUILDING AND SAFETY GRADING INSPECTOR WHEN THE GRADING OPERATION IS READY FOR EACH OF THE FOLLOWING INSPECTIONS:
- A. INITIAL MEETING/ INSPECTION: WHEN THE PERMITTEE IS READY TO BEGIN WORK, BUT BEFORE GRADING OR BRUSHING IS STARTED, A MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR AND THE INSPECTOR TO DISCUSS THE APPROVED PLANS, SOILS REPORT, AND THE SEQUENCE OF THE GRADING OPERATION.
- B. TOE INSPECTION: AFTER THE NATURAL GROUND IS EXPOSED AND PREPARED TO RECEIVE FILL, BUT BEFORE ANY FILL IS PLACED.
- C. EXCAVATION INSPECTION: AFTER THE EXCAVATION IS STARTED, BUT BEFORE THE VERTICAL HEIGHT DEPTH OF THE EXCAVATION EXCEEDS TEN FEET.
- D. FILL INSPECTION: AFTER THE FILL PLACEMENT IS STARTED, BUT BEFORE THE VERTICAL HEIGHT OF THE LIFT EXCEEDS TEN FEET.
- E. DRAINAGE DEVICE INSPECTION: AFTER FORMS AND PIPE ARE IN PLACE, BUT BEFORE ANY CONCRETE IS PLACED.
- F. ROUGH GRADING: WHEN ALL ROUGH GRADING HAS BEEN COMPLETED. THIS INSPECTION MAY BE CALLED FOR AT THE COMPLETION OF THE ROUGH GRADING.
- G. FINAL: WHEN ALL WORK, INCLUDING INSTALLATION OF ALL DRAINAGE STRUCTURES AND OTHER PROTECTIVE DEVICES, HAS BEEN COMPLETED AND THE AS-GRADED PLAN AND REQUIRED REPORTS HAVE BEEN SUBMITTED.

- 26. SPECIAL (CONTINUOUS) INSPECTIONS: CONTINUOUS INSPECTION BY A REGISTERED DEPUTY GRADING INSPECTOR SHALL BE PROVIDED FOR THE FOLLOWING CONDITIONS:
- A. A CONTIGUOUS GRADING AREA EXCEEDING 60,000 SQUARE FEET.
- B. AN EXCAVATED OR FILLED SLOPE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL.
- AN EXCAVATED SLOPE EXCEEDING 40 FEET IN HEIGHT AND THE TOP OF WHICH IS WITHIN 20 FEET OF A PROPERTY LINE COTERMINOUS WITH IMPROVED PRIVATE PROPERTY OR A PUBLIC WAY.
- D. FOUNDATION EXCAVATIONS BELOW A ONE HORIZONTAL TO ONE VERTICAL PLANE INWARD AND DOWN FROM THE PROPERTY LINE.
- 27. CONTINUOUS INSPECTION BY THE SOILS ENGINEER/GEOLOGIST IS REQUIRED FOR EXCAVATION, REMOVAL & RECOMPACTION ISSUANCE OF CERTIFICATE. IF, UPON FINAL INSPECTION OF ANY EXCAVATION OR FILL, IT IS FOUND THAT THE WORK AUTHORIZED BY THE GRADING PERMIT HAS BEEN SATISFACTORILY COMPLETED IN ACCORDANCE WITH REQUIREMENTS OF THIS CODE, A GRADING CERTIFICATE COVERING SUCH WORK SHALL BE ISSUED TO THE OWNER BY THE SUPERINTENDENT OF BUILDING. UPON THE OWNER'S REQUEST, A SEPARATE CERTIFICATE WILL BE ISSUED FOR EACH LOT FOR WHICH BUILDING PERMITS HAVE BEEN ISSUED OR APPLIED FOR PRIOR TO THE COMPLETION OF THE GRADING.
- 28. YARDAGE QUANTITIES FOR PERMIT PURPOSES:

CUT 6,438 CY FILL 6,408 CY EXPORT 30 CY

- 29. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER. SHEETING, SHORING, AND BRACING FOR THE TRENCH EXCAVATION SHALL CONFORM TO THE REQUIREMENTS OF "CONSTRUCTION SAFETY ORDERS," TITLE 8, DIVISION OF INDUSTRIAL SAFETY, STATE OF CALIFORNIA.
- 30. A COPY OF THE GRADING PERMIT AND APPROVED GRADING PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE AT ALL TIMES.
- 31. THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THIS PROJECT. A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE AT ALL TIMES.
- 32. ALL PROPERTY CORNERS SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
- 33. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
- 34. OFFSITE DISPOSAL OF EXCAVATION MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN ITS BID. THE CONTRACTOR SHALL HOLD THE CITY OR ITS AGENTS HARMLESS AS A RESULT OF ANY CLAIMS ARISING FROM ACTIONS IN ROUTE OR AWAY FROM THE SITE.
- 35. WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL PROVISIONS OF THE BUILDING CODE (EXCAVATION AND FILLS).
- 36. FILL PLACEMENT AREAS SHALL BE INSPECTED AND APPROVED BY THE CONSULTANT GEOLOGIST AND SOILS ENGINEER PRIOR TO PLACEMENT OF ANY FILL.
- 37. A REGISTERED CIVIL ENGINEER SHALL SUBMIT TO THE CITY WRITTEN CERTIFICATION OF COMPLETION IN ACCORDANCE WITH THE APPROVED GRADING PLAN. CERTIFICATIONS SHALL BE TO LINE, GRADE, ELEVATION AND LOCATION OF CUT AND FILL SLOPES.
- 38. GRADING SHALL BE DONE UNDER THE SUPERVISION OF A SOILS ENGINEER WHO SHALL CERTIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND WHO SHALL SUBMIT A FINAL COMPACTION REPORT FOR ALL FILLS OVER ONE FOOT DEEP.
- 39. A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR SHALL SUBMIT CERTIFICATION OF PAD ELEVATION WHERE SPECIFIC ELEVATIONS ARE REQUIRED. THE ELEVATION WITH RESPECT TO MEAN SEA LEVEL SHALL BE GIVEN. IF AN ELEVATION WITH RESPECT TO ADJACENT GROUND SURFACE IS REQUIRED THE ACTUAL DISTANCE ABOVE THE ADJACENT GROUND SHALL BE
- 40. APPROXIMATE DATE OF: BEGINNING OPERATION MAY 2013, COMPLETION DECEMBER 2013. NO WORK WILL BE CONDUCTED WITHIN THE BASEBALL FIELDS BETWEEN JANUARY AND JUNE.
- 41. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 15). THE CONTRACTOR SHALL PROVIDE PROTECTIVE MEASURES AND TEMPORARY DRAINAGE FACILITIES TO PROTECT ADJOINING PROPERTIES AND THE PUBLIC RIGHT-OF-WAY FROM MUD, SILT AND STORM WATERS ORIGINATING ON OR DIVERTED FROM THE CONSTRUCTION SITE. CONSTRUCT TEMPORARY DESILTING BASIN FOR TRAPPING MUD, DEBRIS, ETC., AND TO CLEAR THE WATER PRIOR TO DEWATERING BY ANY ACCEPTABLE MEANS LIKE PUMPING. WHEN WATER HAS BEEN CLEARED, PUMPING CAN BE MADE DIRECTLY INTO THE EXISTING PUBLIC STORM DRAIN SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE SAID STORM DRAIN AFTER COMPLETION OF DEWATERING. DEWATERING OR PUMPING DIRECTLY, OR SHEET FLOW OVER PUBLIC SIDEWALK AND ROAD SURFACE, WILL NOT BE PERMITTED. DEWATERING OR PUMPING INTO THE CITY OF TORRANCE OR LACFCD STORM DRAIN SYSTEM MAY REQUIRE PERMITS FROM SAID AGENCIES. THEY SHALL BE CONSULTED BEFORE DOING THE WORK.
- 42. THIS DRAWING AND THE DATA HEREON ARE HEREBY MADE A PART OF THE SPECIFICATION. APPROVAL OF THIS PLAN BY THE CITY DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATIONS OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY, PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO MAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINE NOT ON RECORD OR NOT SHOWN ON THESE PLANS. ALL UTILITY LINES AND STRUCTURES THAT MAY BE DAMAGED ON ACCOUNT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE CITY.
- 43. ANY MODIFICATIONS OF OR CHANGES IN APPROVED GRADING PLANS MUST BE APPROVED BY THE BUILDING OFFICIAL.

# ESTIMATED EARTHWORK QUANTITIES

EARTHWORK QUANTITIES	AMIE	HENRIETTA	ENTRADERO	
IMPORT (FILL)	9,153 CY	2,928 CY	3,217 CY	
EXPORT (CUT)	2,856 CY	8,470 CY	4,002 CY	
	6,297 CY (IMPORT)	5,542 CY (EXPORT)	785 CY (EXPORT)	
SUB-TOTALS				6,438 CY (EXPORT) 6,408 CY (IMPORT)
TOTALS				30 CY (EXPORT)

- 1. IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO REVIEW THE GRADING PLANS AND SOILS REPORT THOROUGHLY PRIOR TO SITE MOBILIZATION. IT IS ALSO THE GRADING CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CIVIL AND SOILS ENGINEERS IF ONSITE DISCREPANCIES ARE OBSERVED THAT WOULD AFFECT THE EARTHWORK QUANTITIES.
- 2. THE EXISTING TOPOGRAPHY AS DELINEATED ON THESE DRAWINGS SHALL BE UTILIZED AS THE BASIS FOR ALL EARTHWORK COMPUTATIONS. SAID TOPOGRAPHY SHALL BE PRESUMED TO BE ACCEPTABLE TO ALL INTERESTED PARTIES UNLESS A DEVIATION IS FOUND PRIOR TO THE START OF GRADING IN ANY SPECIFIC AREAS. ANY DEVIATION SO DETERMINED SHALL BE PROMPTLY TRANSMITTED TO ALL INTERESTED PARTIES.
- 3. THE CONTRACTOR IS REQUIRED TO ESTIMATE THE QUANTITIES OF GRADING WORK TO BE DONE AND INCLUDE ALL COSTS THEREFROM IN HIS BID, AS NO ADDITIONAL ALLOWANCE WILL BE MADE WITHOUT PRIOR CONSENT FROM THE OWNER.
- 4. OVER-EXCAVATION AND/OR EXCESS BACKFILLING OR DUPLICATION OF GRADING ACTIVITIES IS NOT A BASIS FOR ADDITIONAL COMPENSATION. THIS ALSO APPLIES WHERE MATERIAL IS TO BE REMOVED AND REPLACED TO REDUCE MOISTURE CONTENT.
- 5. OFF-SITE DISPOSAL OF EXCAVATION MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN HIS BID. THE CONTRACTOR SHALL HOLD THE OWNER AND ENGINEER HARMLESS AS A RESULT OF ANY CLAIMS ARISING FROM ACTIONS ENROUTE OR AWAY FROM THE SITE.

  EXCAVATION MATERIALS SHALL BE DISPOSED OF AT A ENVIRONMENTALLY CLEARED FILL LOCATION.
- 6. EARTH VOLUMES SHOWN HEREON ARE ESTIMATES BASED UPON THE GEOTECHNICAL ANALYSIS PERFORMED BY THE NAMED SOILS ENGINEER AND TOPOGRAPHIC SURVEY OF THE EXISTING GROUND SURFACE AT THE TIME OF PLAN PREPARATION. EARTHWORK VOLUMES ARE COMPUTED BY METHODS COMMONLY USED IN STANDARD ENGINEERING PRACTICE, AND ARE INTENDED FOR USE IN ESTABLISHING GOVERNING AGENCY FEES. ACTUAL FIELD CONDITIONS MAY VARY FROM OBSERVED OR MEASURED CONDITIONS AT THE TIME OF PLAN PREPARATION. EARTHWORK QUANTITIES MAY VARY AS A RESULT.
- 7. THE QUANTITIES FOR THESE PLANS ARE BASED UPON 0% SHRINKAGE AND 0% SUBSIDENCE. SHRINKAGE PERCENTAGE IS SHOWN FOR REFERENCE ONLY. ACTUAL SHRINKAGE VOLUMES MAY VARY CONSIDERABLY.

# REQUIRED INSPECTION

- A PRE-GRADING MEETING SHALL BE SCHEDULED 48 HOURS PRIOR TO START OF GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOILS ENGINEER, GEOLOGIST, CITY GRADING ENGINEER OR THEIR REPRESENTATIVES. REQUIRED FIELD INSPECTIONS WILL BE OUTLINED AT THE MEETING.
- 2. A PRE-PAVING MEETING SHALL BE SCHEDULED 48 HOURS PRIOR TO START OF THE SUB-GRADE PREPARATION FOR THE PAVING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, PAVING CONTRACTORS, DESIGN CIVIL ENGINEER, SOILS ENGINEER, CITY GRADING ENGINEER OR THEIR REPRESENTATIVES. REQUIRED FIELD INSPECTIONS WILL BE OUTLINED AT THE MEETING.

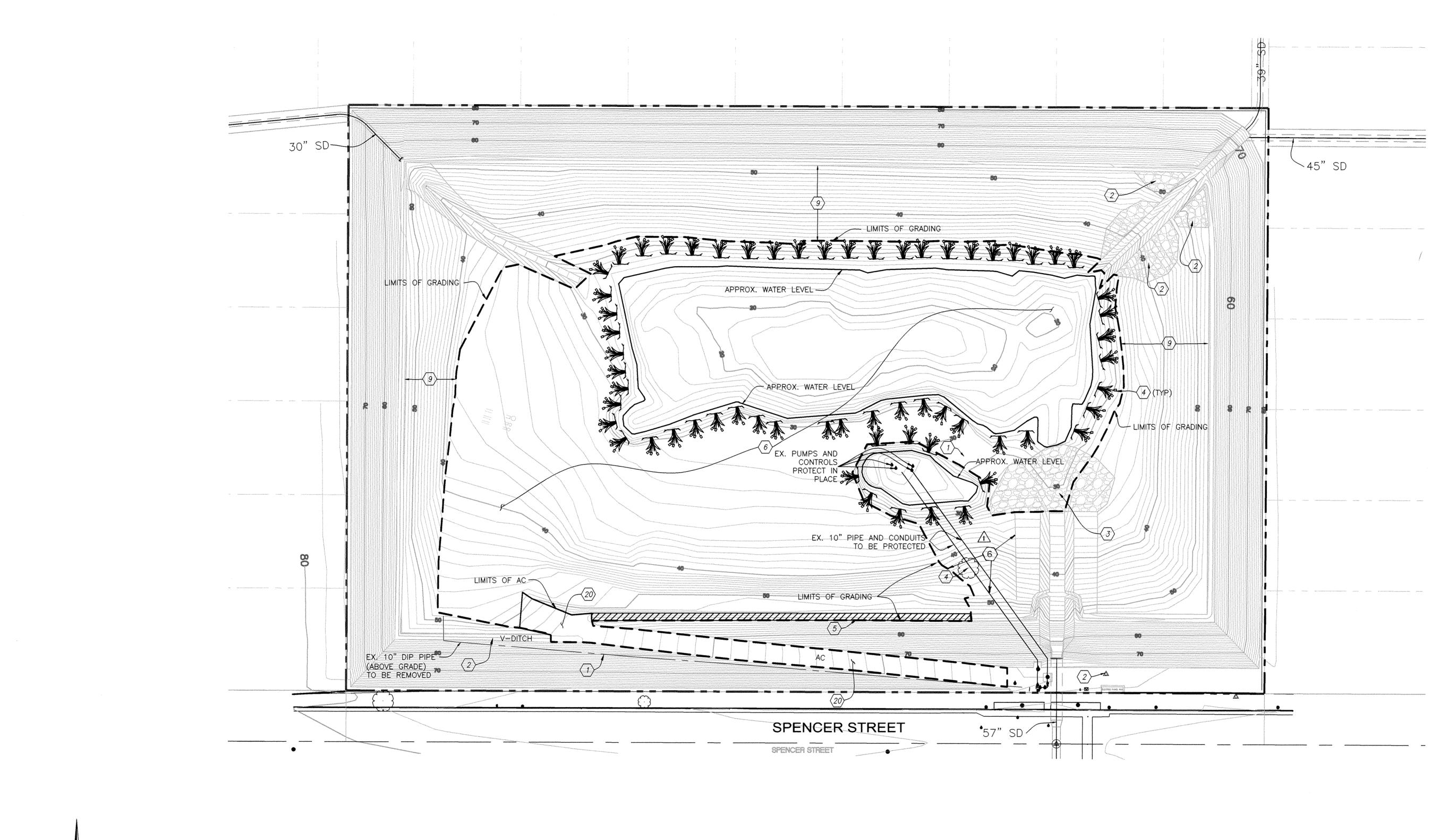
GRADING NOTES: C-10

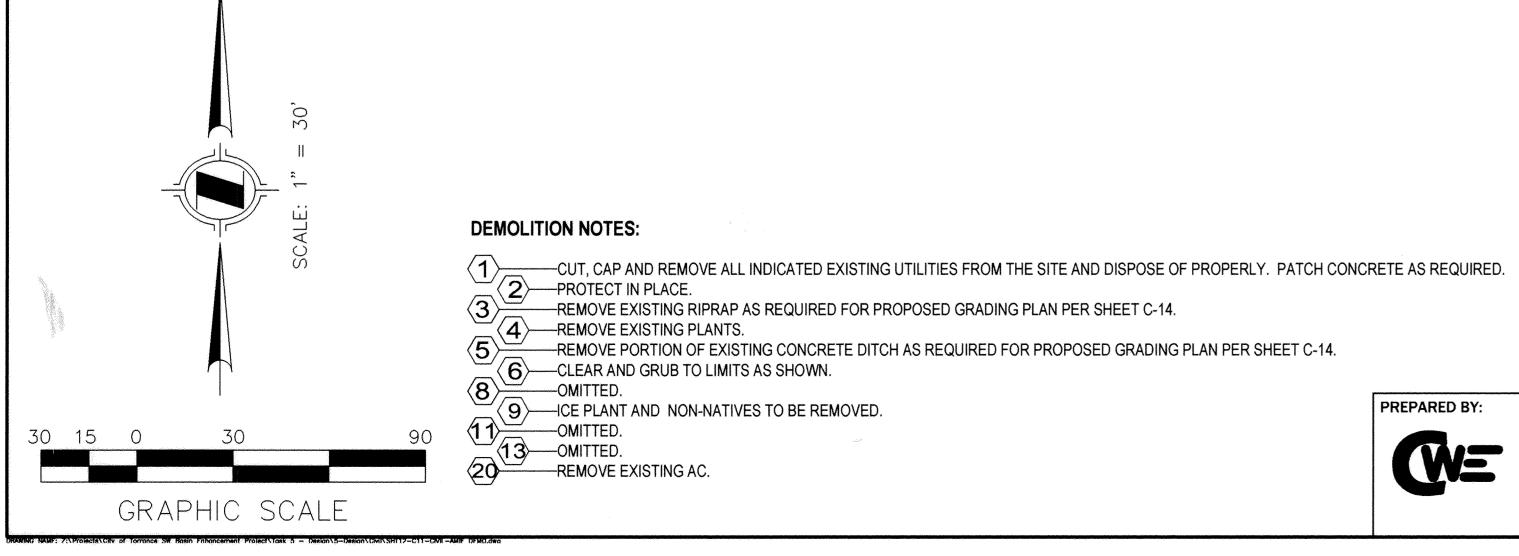
REV.	DATE	DESCRIPTION	BY	CHECKED	PROFESSIONAL DE SELLA PROFESSIONAL PROFESSIO		F TORRANCE RKS DEPARTMENT
					No. 59226 Exp. 06/30/13	DRAWN: ALF	APPROVED:
					PROFESSIONAN BAONA CERT	DESIGNED: C.P.  PROJECT ENGINEER: VIKRAM BAPNA	TOUEC J. SEMAAN DATE ACTING CITY ENGINEER R.C.E. NO. 59226 EXP. 06/30/13
					No. C52060 R7	DIVISION FNGINFER: JOHN DETTLE	SCALE: AS SHOWN SHEET 11 OF 111  PLAN NO. SD - 500

(WE

PREPARED BY:

1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX www.cwecorp.com

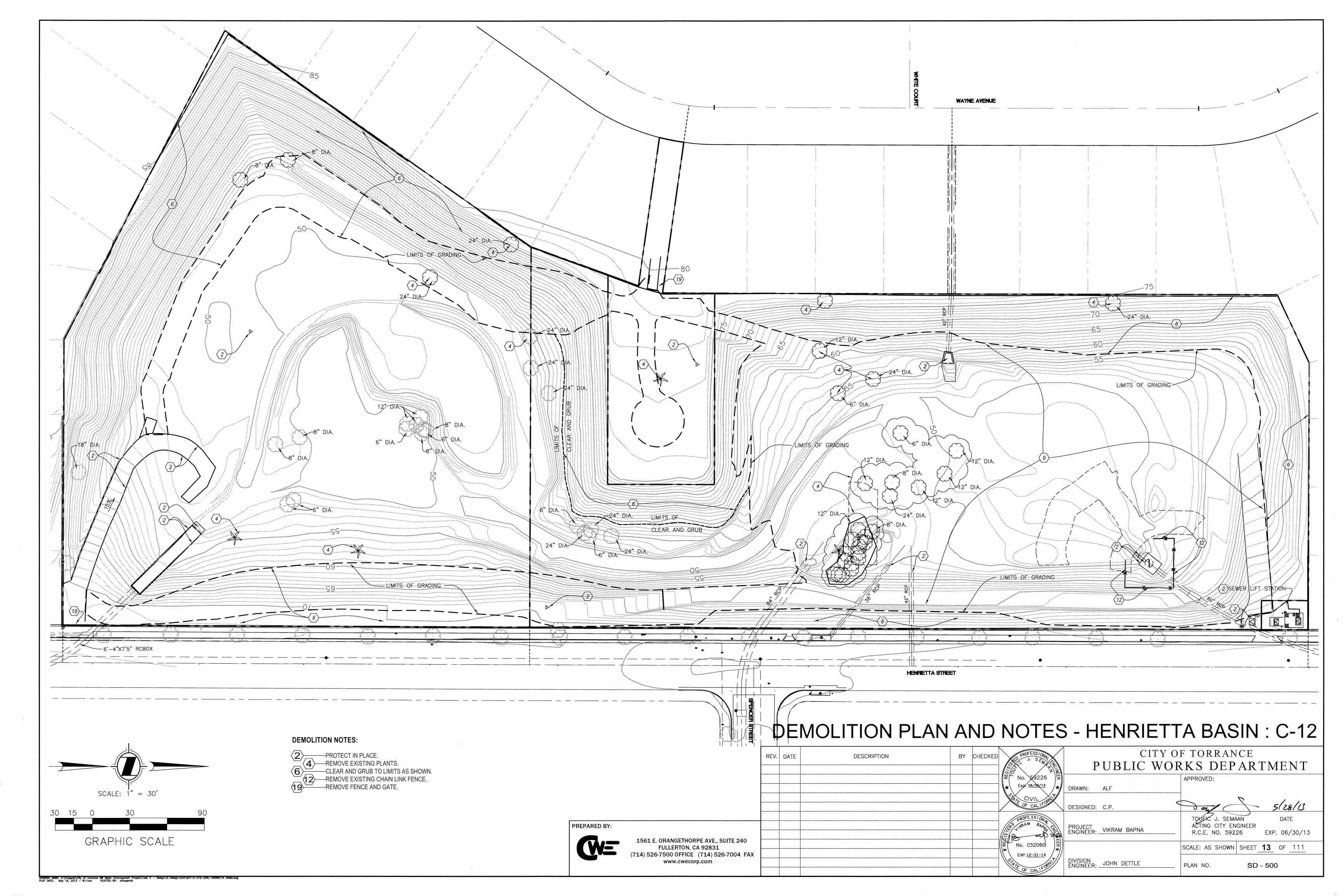


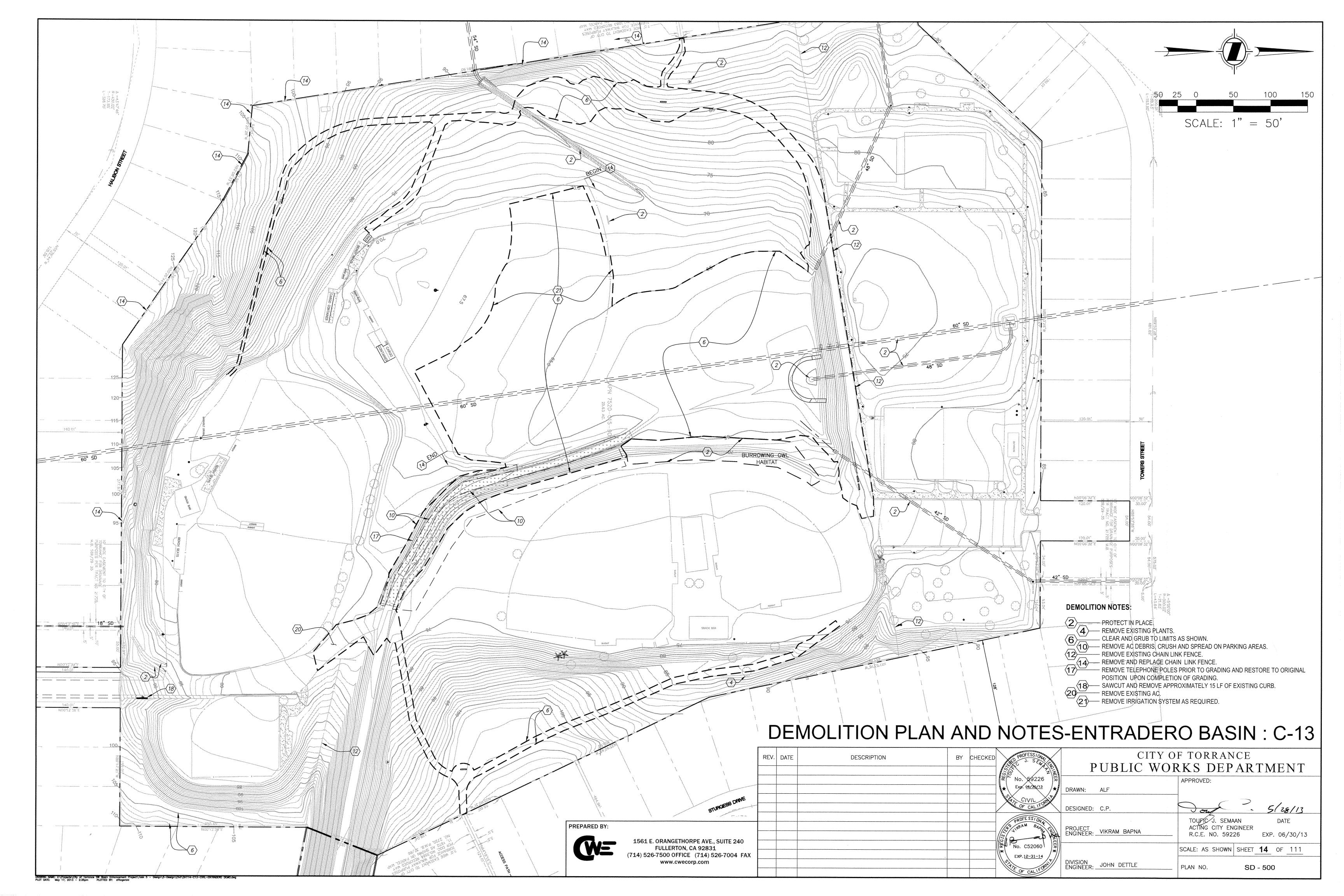


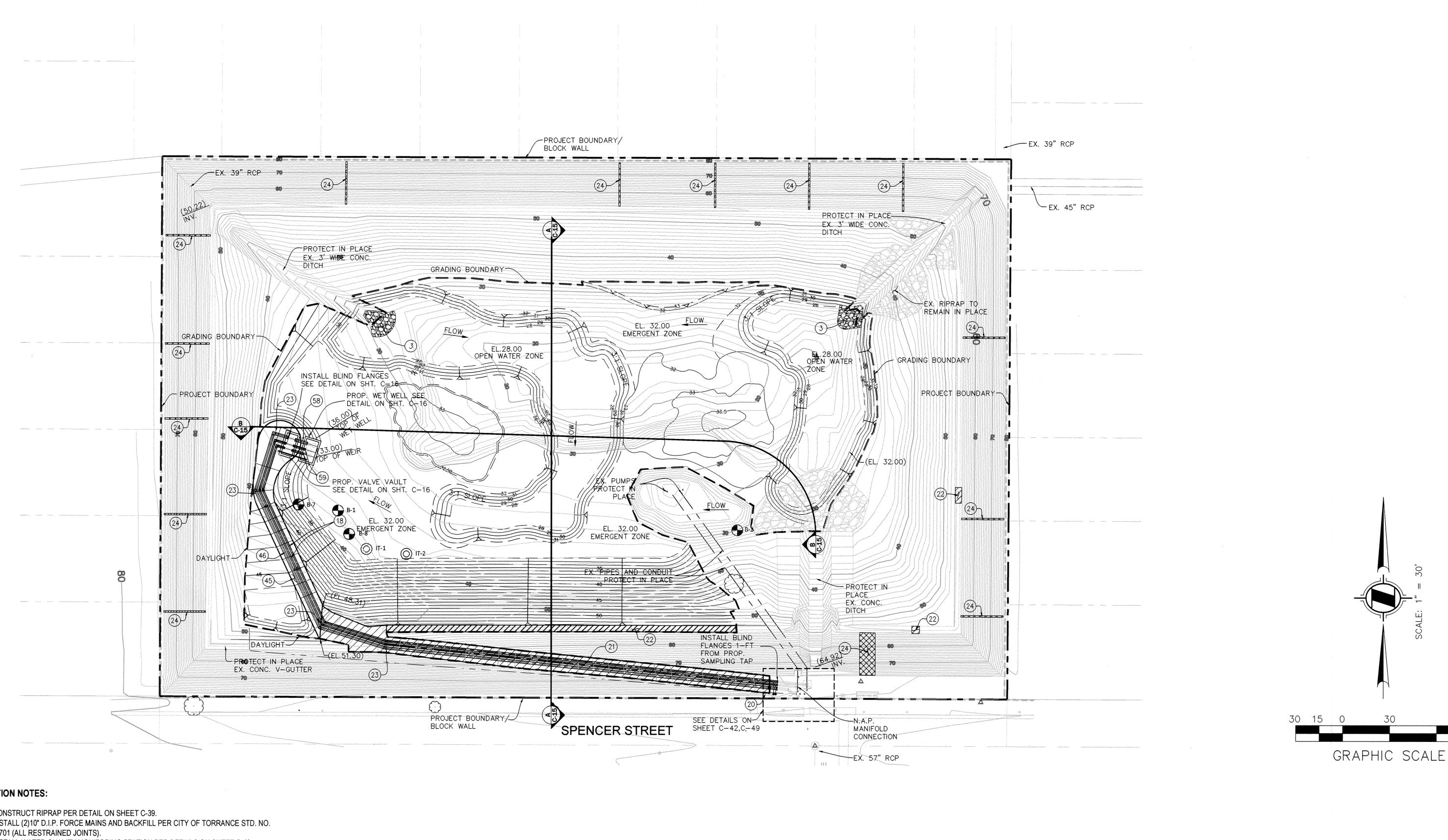
**DEMOLITION NOTES:** 

# DEMOLITION PLAN AND NOTES - AMIE BASIN : C-11

	REV.	DATE	DESCRIPTION	BY	CHECKED	PROFESSIONAL BILE		OF TORRANCE
).	$\triangle$	1/15/14	ADDED NOTE 6	VP	JCD			RKS DEPARTMENT
						Exp. 12/3V14		APPROVED:
							DRAWN: ALF	
						CIVIL OF CALIFORN	DESIGNED: C.P.	1/22/14
4504 5 ODANOSTHODDS AVS. CHITS 040						PRUFE SSI DNA	PROJECT ENGINEER: VIKRAM BAPNA	CRAIG BILEZERIAN DATE CITY ENGINEER R.C.E. NO. 55339 EXP. 12/31/14
1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX						No. C52060 **  EXP.12-31-14		SCALE: AS SHOWN SHEET 12 OF 111
www.cwecorp.com						No. 1	DIVISION ENGINEER: JOHN DETTLE	PLAN NO. SD - 500
						OF CALIFOR		







# **CONSTRUCTION NOTES:**

- CONSTRUCT RIPRAP PER DETAIL ON SHEET C-39.
  INSTALL (2)10" D.I.P. FORCE MAINS AND BACKFILL F
- 20—INSTALL WATER QUALITY MONITORING STATION PER DETAILS ON SHEET C-42.

  RECONSTRUCT 4" A.C. OVER 4" C.M.B. EXISTING ACCESS ROAD.

  EXISTING V-GUTTER TO BE REMOVED AND REPLACED IN KIND.
- 24)—STRUCTURAL CRACK REPAIR BY EPOXY INJECTION (ACI RAP-1) ON CONCRETE SLOPE
- CONSTRUCT 4" C.M.B. ACCESS ROAD PER DETAIL ON SHEET C-37.

  INSTALL 14" D.I.P. FORCE MAIN AND BACKFILL PER CITY OF TORRANCE STD. NO. T-701

# PUMP CONSTRUCTION NOTES:

(ALL RESTRAINED JOINTS).

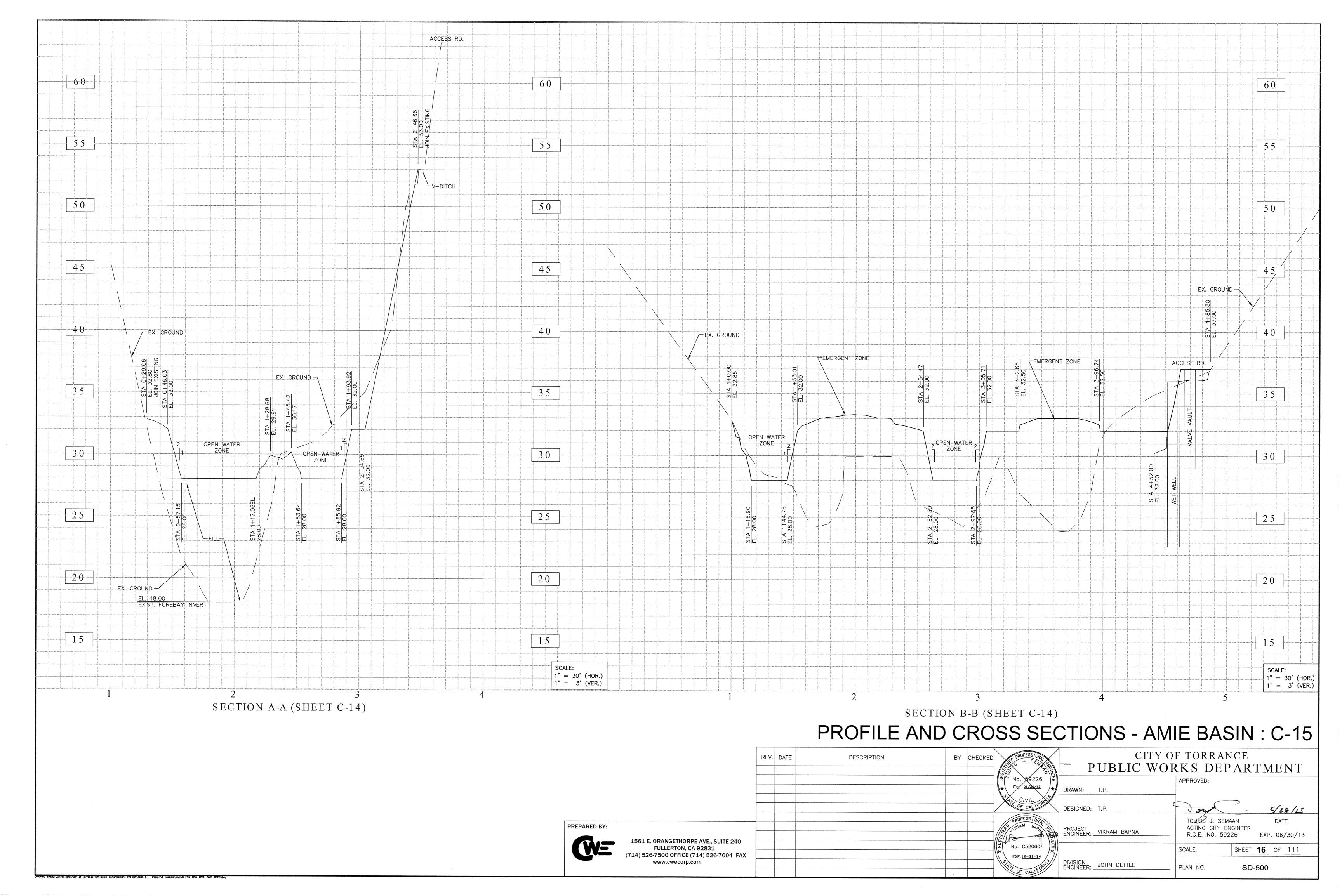
- ----INSTALL 7.6' OF TEMPORARY 14" PVC PIPE AND FLANGES TO MAINTAIN ALIGNMENT
- BETWEEN VALVE VAULT AND WET WELL.

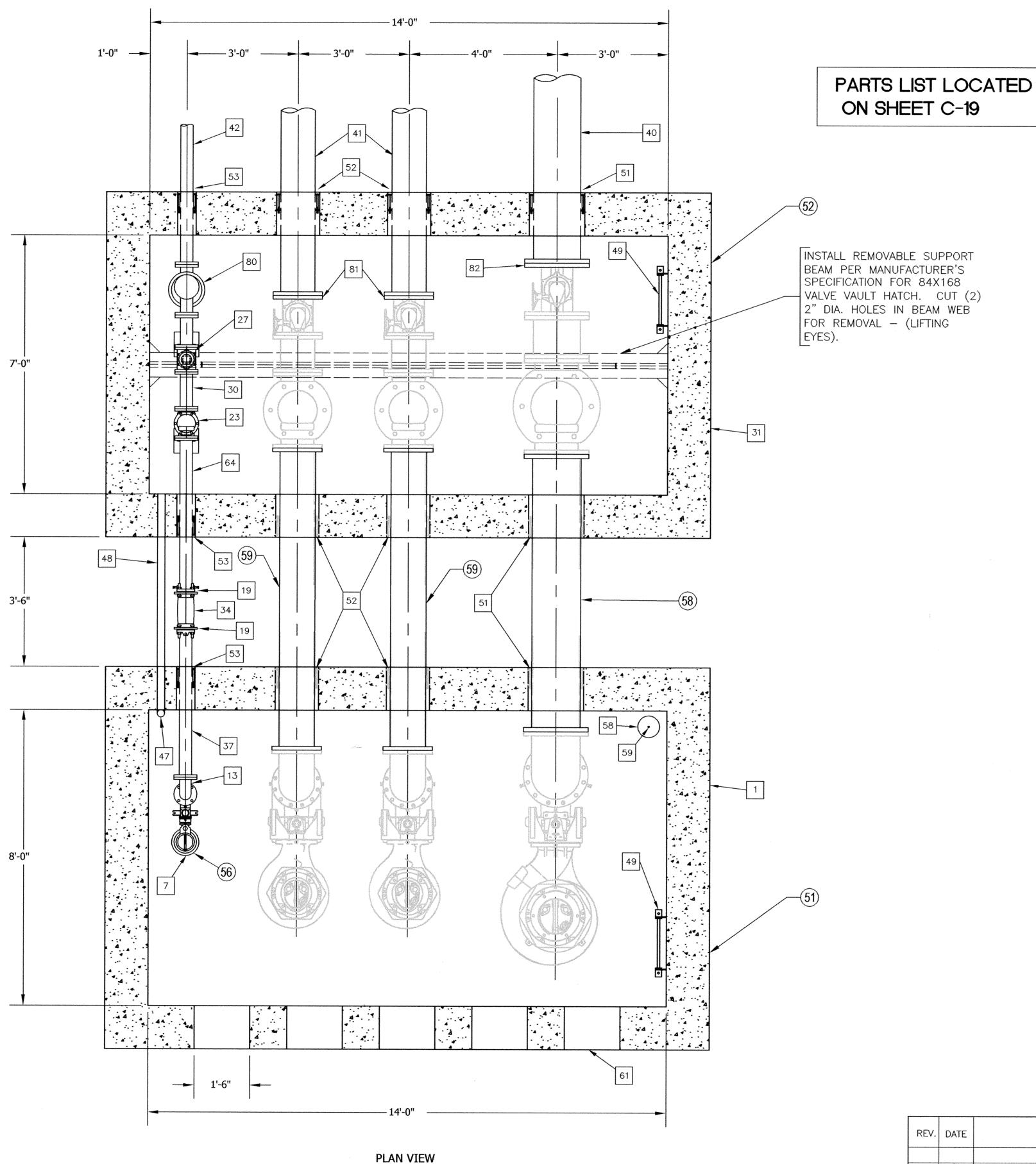
  10 INSTALL 7.6' OF TEMPORARY 10" PVC PIPE AND FLANGES TO MAINTAIN ALIGNMENT BETWEEN VALVE VAULT AND WET WELL.

# LEGEND

# GRADING PLAN - AMIE BASIN : C-14

GRADING BOUNDARY - WORK LIMIT							1
4" A.C. OVER 4" C.M.B. ACCESS ROAD	REV.	DATE	DESCRIPTION	BY (	CHECKED PROFESSIONAL BILESIA	CITY OF TORRANCE PUBLIC WORKS DEPARTMENT	
APPROXIMATE BORING LOCATION (SEE SHEET B-1 FOR DETAIL)					₩ No. 55339 Exp. 12/3V14	/ II / NO / LD.	
APPROXIMATE INFILTRATION TEST LOCATION (SEE SHEET B-1 FOR DETAIL)					C/VIL OF CALIFOR	DESIGNED: C.P.	ļ
PREPARED BY:  1561 E. ORANGETHORPE AVE., SUITE 240					PROFESSIONAL DE LA PARA DEL PARA DE LA PARA	PROJECT VIKRAM BAPNA CITY ENGINEER R.C.E. NO. 55339 EXP. 12/31/	14
1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX					No. C52060 ** EXP.12-31-14	SCALE: AS SHOWN SHEET 15 OF THE	
www.cwecorp.com					STATE OF CALIFOR	DIVISION JOHN DETTLE	





SCALE: 1" = 20'

PLOT DATE: Dec 06, 2013 — 10:40am PLOTED BY: vprased

1561 E. ORANGETHORPE AVE., SUITE 240

FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX

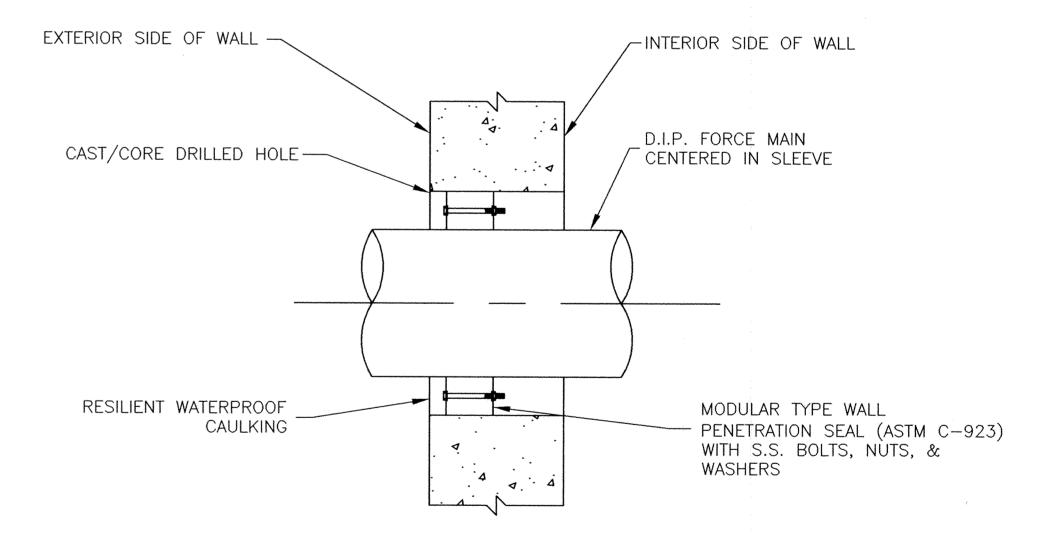
## GENERAL NOTES

- 1. ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF Fc = 4,000 PSI (28 DAY STRENGTH) EXCEPT
- 2. REINFORCING STEEL SHALL CONFORM TO A.S.T.M. 615-80, GRADE 60.
- 3. MINIMUM CLEAR COVER SHALL BE 2" UNLESS OTHERWISE NOTED.
- 4. DIMENSIONS FROM FACE OF CONCRETE TO REINFORCING BARS ARE CLEAR DISTANCES.
- 5. DIMENSIONS FOR BAR SPACING ARE CENTER TO CENTER.
- 6. ALL LAPS SHALL BE 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.
- 7. BEDDING MATERIAL SHALL BE AT LEAST 1.0 FOOT THICK LAYER OF 3/4 INCH DIAMETER CRUSHED ROCK.
- 8. ALL WET WELL JOINTS SHALL BE WATERTIGHT, O-RING/FORSHEDA AND MASTIC BUTYL WRAP SEALS.
- 9. ALL BOLTS SHALL BE STAINLESS STEEL TYPE 304L WITH STAINLESS STEEL HARDWARE.
- 10. ALL TAPS INTO FITTINGS SHALL BE MADE INTO A BOSS.
- 12. EDGE OF VALVE VAULT SHALL BE LOCATED 3.5 FEET FROM THE WET WELL. IF VALVE VAULT IS PLACED ON EXCAVATED MATERIALS, BACKFILL SHALL BE COMPACTED IN 8" LOOSE LIFTS TO 95% STANDARD PROCTOR DENSITY PRIOR TO INSTALLATION OF VALVE VAULT.
- 13. BACKFILL SHALL BE DONE IN ACCORDANCE WITH SPECIFICATIONS.
- 14. PUMP STATION AND ACCESS ROAD PLAN VIEW ARE LOCATED ON SHEET C-14.
- 15. PARTS LIST FOR ALL COMPONENTS OF THE PUMP STATION AND VALVE VAULT IS LOCATED ON SHEET C-19.
- 16. INSTALL ALL PIPE AND FITTINGS PER SIZE AND DIAMETER PROVIDED IN PARTS LIST ON SHEET C-19 AND IN THE SPECIFICATIONS.
- 17. INTERIOR OF VAULTS SHALL HAVE CRYSTALLINE WATERPROOF COATING.
- 18. ALL METAL PIPES EXPOSED TO SOIL SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE WRAP.
- 19. ALL PIPE SPOOLS TO BE FIELD FITTED.
- 20. ALL PIPE SPOOL LENGTHS IN PARTS LIST ARE APPROXIMATE.

### **CONSTRUCTION NOTES:**

- (51)— INSTALL 8' X 14' X 13'-4" DEEP REINFORCED CONCRETE WET WELL PER PLAN ON SHEET C-14.
- INSTALL 7' X 14' X 8' DEEP REINFORCED CONCRETE VALVE VAULT PER PLAN ON SHEET C-14.
- INSTALL 1 15HP 60Hz SUBMERSIBLE PUMP #4 (PART #7) WITH A DESIGN PUMPING RATE = 59 GPM AT A TDH = 201 FEET.

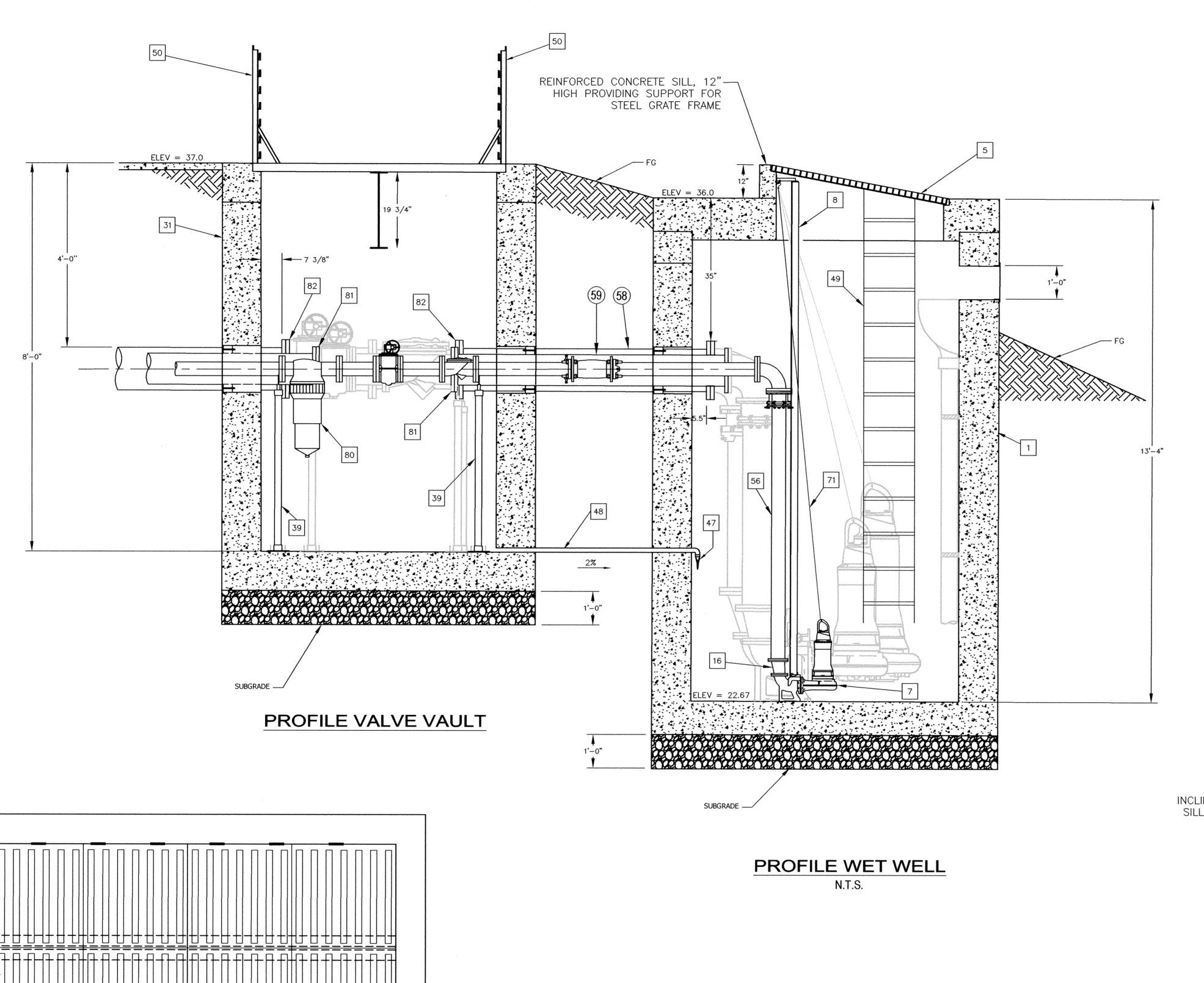
  INSTALL 7.6' TEMPORARY 14" PVC PIPE AND FLANGES TO MAINTAIN ALIGNMENT BETWEEN WET WELL AND VALVE
  - 10" PVC PIPE AND FLANGES TO MAINTAIN ALIGNMENT BETWEEN WET WELL AND VALVE



PIPE PENETRATION THROUGH WALL NOT TO SCALE

# AMIE BASIN PUMP STATION PLAN: C-16

REV.	DATE	DESCRIPTION	BY	CHECKED	PROFESSIONAL PROFE		TORRANCE KS DEPARTMENT
					S C No. 58339 Z EXP. 12/31/14 ★  EXP. 12/31/14 ★  C/VIL OF CAL 1FOR	DRAWN: ALF  DESIGNED: C.P.	APPROVED:  SBe 1/22/14
					PROFESSIONAL CITY	PROJECT VIKRAM BAPNA	CRAIG BILEZERIAN DATE CITY ENGINEER R.C.E. NO. 55339 EXP. 12/31/14
		·	-		No. C52060	DIVISION IOUN PETTIE	SCALE: AS SHOWN SHEET 17 OF 111  PLAN NO. SD - 500



### **GENERAL NOTES**

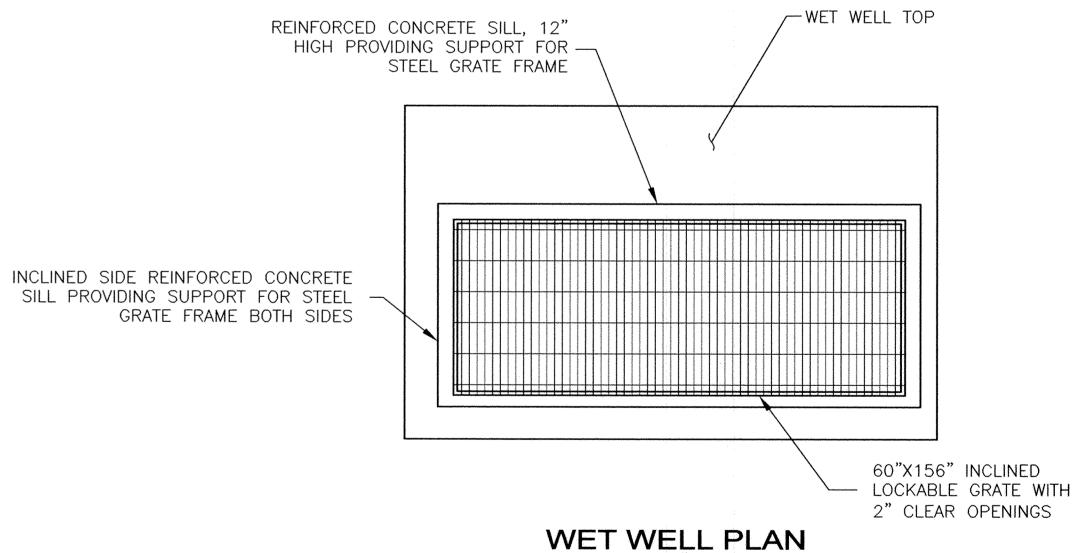
- 1. BEDDING MATERIAL SHALL BE AT LEAST 1.0 FOOT THICK LAYER OF 3/4 INCH DIAMETER CRUSHED
- 2. ALL WET WELL JOINTS SHALL BE WATERTIGHT, O-RING/FORSHEDA AND MASTIC BUTYL WRAP SEALS.
- 3. ALL BOLTS SHALL BE STAINLESS STEEL TYPE 304L WITH STAINLESS STEEL HARDWARE.
- 4. ALL TAPS INTO FITTINGS SHALL BE MADE INTO A BOSS.
- 5. EDGE OF VALVE VAULT SHALL BE LOCATED 3.5 FEET FROM THE WET WELL. IF VALVE VAULT IS PLACED ON EXCAVATED MATERIALS, BACKFILL SHALL BE COMPACTED IN 8" LOOSE LIFTS TO 95% STANDARD PROCTOR DENSITY PRIOR TO INSTALLATION OF VALVE VAULT.
- 6. BACKFILL SHALL BE DONE IN ACCORDANCE WITH SPECIFICATIONS.
- 7. PUMP STATION AND ACCESS ROAD PLAN VIEW ARE LOCATED ON SHEET C-14.
- 8. PARTS LIST FOR ALL COMPONENTS OF THE PUMP STATION AND VALVE VAULT IS LOCATED ON SHEET C-19.
- 9. INSTALL ALL PIPE AND FITTINGS PER SIZE AND DIAMETER PROVIDED IN PARTS LIST LOCATED ON SHEET C-19 AND IN THE SPECIFICATIONS.
- 10. INTERIOR OF VAULTS SHALL HAVE CRYSTALLINE WATERPROOF COATING.
- 11. ALL METAL PIPES EXPOSED TO SOIL SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE WRAP.

### **CONSTRUCTION NOTES:**

AND VALVE VAULT.

- (58)——— INSTALL 7.6' TEMPORARY 14" PVC PIPE AND FLANGES TO MAINTAIN ALIGNMENT BETWEEN WET WELL
- AND VALVE VAULT.
  INSTALL 7.6' TEMPORARY 10" PVC PIPE AND FLANGES TO MAINTAIN ALIGNMENT BETWEEN WET WELL

PARTS LIST LOCATED ON SHEET C-19



# AMIE BASIN PUMP STATION PROFILE: C-17

INCLINED GRATE (N.T.S.)

		/\IVIIL	_ DAC		II SIAHON	INDITLE . C-17
REV.	DATE	DESCRIPTION	BY CHECKE			F TORRANCE RKS DEPARTMENT
				No. 58339 P R R R R R R R R R R R R R R R R R R	DRAWN: ALF	APPROVED:
				OF CALIFORN	DESIGNED: C.P.	CRAIG BILEZERIAN DATE
				GIO POLITICA MENTALINE	PROJECT ENGINEER: VIKRAM BAPNA	CITY ENGINEER  R.C.E. NO. 55339 EXP. 12/31/14
				No. C52060		SCALE: AS SHOWN SHEET 18 OF 111
	,			OF CALIFORNIA	DIVISION ENGINEER: JOHN DETTLE	PLAN NO. SD - 500

# HINGES 4-ALUN CLEAR CONFIG

4-ALUMINUM HATCH DOORS WITH CLEAR OPENING OF 42"X84" IN THE CONFIGURATION SHOWN. SEE U.S.F. SHOP DRAWING PER SPECIFICATIONS.

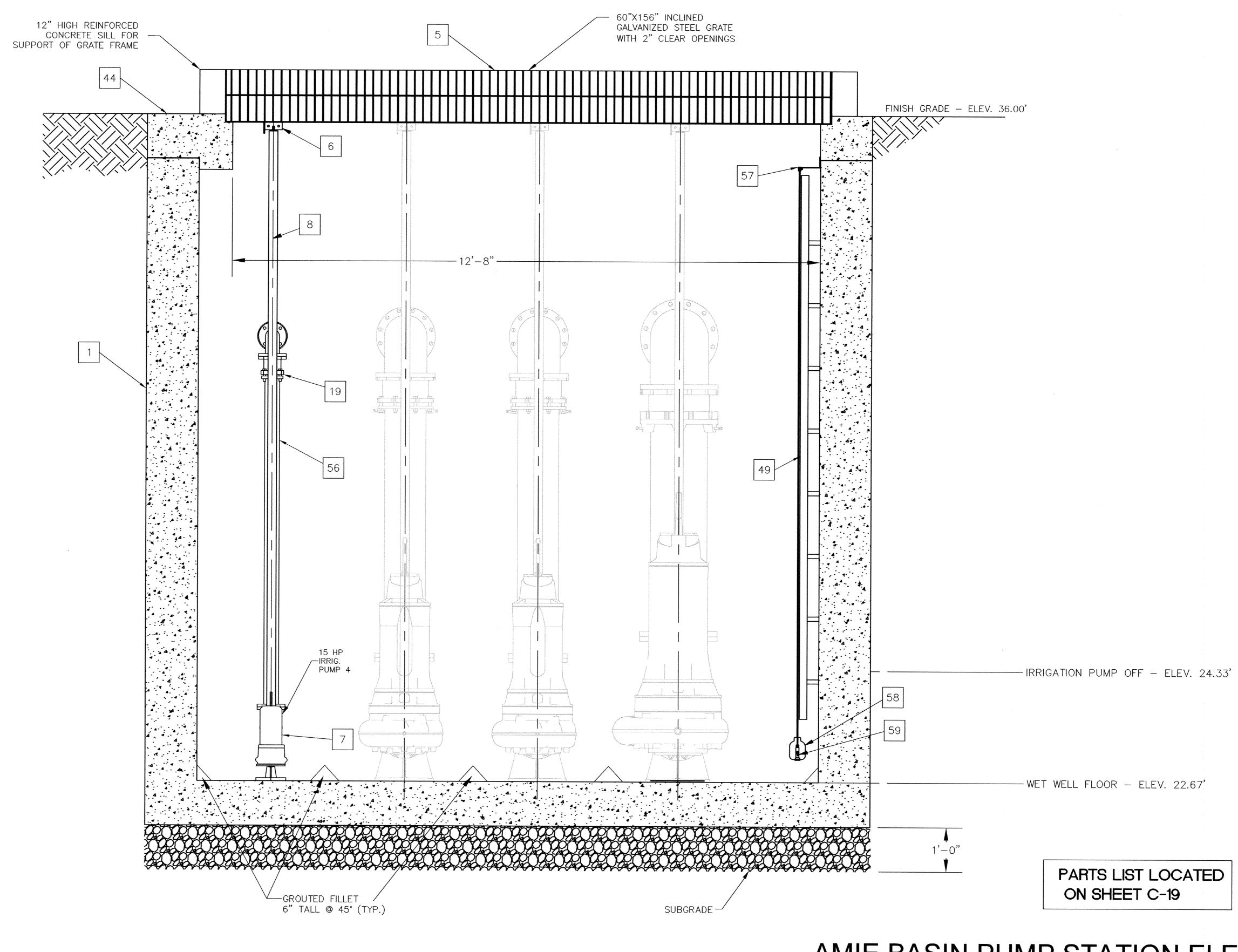
VALVE VAULT PLAN
ACCESS HATCH CONFIGURATION (N.T.S.)

PER SPECIFICATIONS

PREPARED BY:

1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX

ming name: X:\Eng\/Progod\/anie Pump Stotion Upgrode\Shi18-C17-CML-Ame PS Profile P7;1\Shi18-C17-CML-Ame PS Profile P7;1\ I DATE: Dec 12, 2013 - 9:26cm PLOTED RY: virrosod



# **GENERAL NOTES**

- BEDDING MATERIAL SHALL BE AT LEAST 1.0 FOOT THICK LAYER OF 3/4 INCH DIAMETER CRUSHED ROCK.
- ALL WET WELL JOINTS SHALL BE WATERTIGHT, O-RING/FORSHEDA AND MASTIC BUTYL WRAP SEALS.
- ALL BOLTS SHALL BE STAINLESS STEEL TYPE 304L WITH STAINLESS STEEL HARDWARE.
- ALL TAPS INTO FITTINGS SHALL BE MADE INTO A BOSS.
- EDGE OF VALVE VAULT SHALL BE LOCATED 3.5 FEET FROM THE WET WELL. IF VALVE VAULT IS PLACED ON EXCAVATED MATERIALS, BACKFILL SHALL BE COMPACTED IN 8" LOOSE LIFTS TO 95% STANDARD PROCTOR DENSITY PRIOR TO INSTALLATION OF VALVE VAULT.
- BACKFILL SHALL BE DONE IN ACCORDANCE WITH SPECIFICATIONS.
- PUMP STATION AND ACCESS ROAD PLAN ARE LOCATED ON SHEET C-14.
- 8. PARTS LIST FOR ALL COMPONENTS OF THE PUMP STATION AND VALVE VAULT IS LOCATED ON SHEET C-19.

# AMIE BASIN PUMP STATION ELEVATION: C-18

1/22/14

DATE

EXP. 12/31/14

SD - 500

**ELEVATION VIEW** CITY OF TORRANCE BY CHECKED REV. DATE DESCRIPTION NOT TO SCALE **PUBLIC WORKS DEPARTMENT** APPROVED: ★ Exp. 12/31/14 DRAWN: ALF DESIGNED: C.P. CRAIG BILEZERIAN PREPARED BY: PROJECT VIKRAM BAPNA CITY ENGINEER R.C.E. NO. 55339 1561 E. ORANGETHORPE AVE., SUITE 240 FULLERTON, CA 92831 SCALE: AS SHOWN SHEET 19 OF 111 (714) 526-7500 OFFICE (714) 526-7004 FAX DIVISION ENGINEER: JOHN DETTLE PLAN NO.

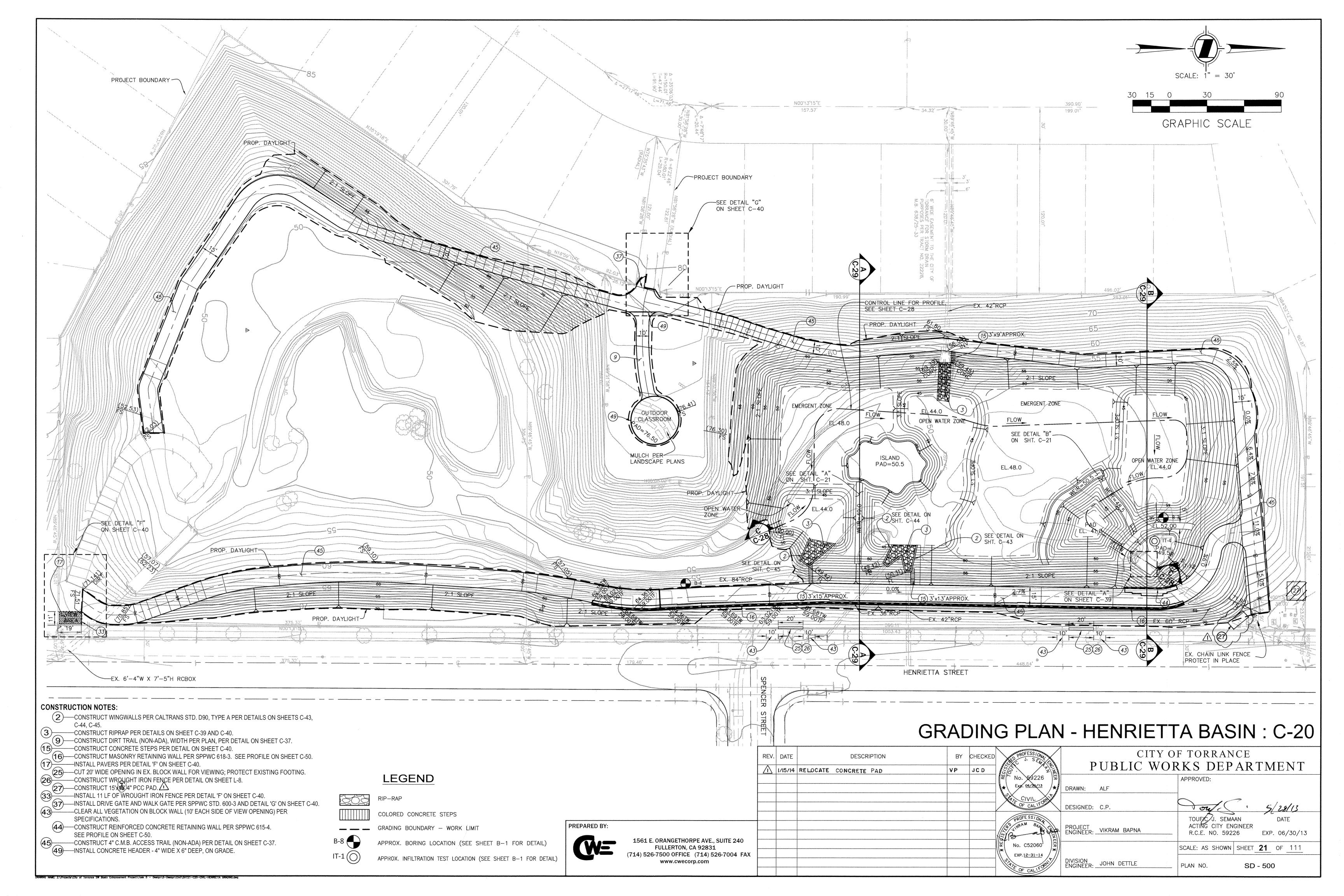
	PARTS LIST		·····	PARTS LIST
ITEM	QTY DESCRIPTION	ITEM	QTY	DESCRIPTION
1	1 8'x14'x13'-4" DEEP PRECAST CONCRETE WET WELL	40	1	14" DIP X PE, 42" SPOOL
2	OMIT	41	1	10" DIP X PE, 46" SPOOL
3	OMIT	42	1	3" DIP FLG x PE 72" SPOOL
4	OMIT	43		OMIT
5	1 60" X 156" (CLEAR OPEN) GALV. GRATE WITH 2" OPENINGS, HINGED,	44	1	JENSEN PRECAST CONCRETE FLAT TOP
	CAST IN FRAME, LOCKABLE.	45		OMIT
6	1 304SS UPPER GUIDE RAIL BRACKET	46		OMIT
7	1 15 HP SUBMERSIBLE PUMP W/ AUTO COUPLING	47	1	2" TIDEFLEX SERIES TF-2 CHECK VALVE
8	1 2" SCH40 GUIDE RAIL - 10' STAINLESS STEEL	48	1	2"ø HDPE PIPE, SCH 80
9	OMIT	49	2	POLYMERE/STAINLESS STEEL ACCESS LADDER
10	OMIT	50	4	21"x42" ALUMINUM DOOR HATCH
11	OMIT	51	3	14" FLEXIBLE PIPE CONNECTOR MEETING ASTM C-923
12	OMIT	52	6	10" FLEXIBLE PIPE CONNECTOR MEETING ASTM C-923
13	1 3" DUCTILE IRON FLANGED 90° ELBOW — CLASS 125	53	3	3" FLEXIBLE PIPE CONNECTOR MEETING ASTM C-923
14	OMIT	54		OMIT
15	OMIT	55		OMIT
16	1 2"X3" DUCTILE IRON FLANGED ECCENTRIC REDUCER — CLASS 150	56	1	3" DIP FLG x PE, 96" SPOOL
19	3 3" RESTRAINED FLANGE COUPLING ADAPTOR (RFCA) (BY ROMAC)	57	1	SS FLOAT BRACKET W/ CORD GRIPS
20	OMIT	58	1	INTERNALLY WEIGHTED NON-MERCURY MECHANICAL FLOAT
22	OMIT	59	1	PRESSURE TRANSDUCER
23	1 3" VAL-MATIC FLANGED SWINGFLEX CHECK VALVE	60		OMIT
24	OMIT	61	5	12" X 18" BOLT DOWN GALV. GRATE WITH 2" OPENINGS
25	OMIT	62		OMIT
26	OMIT	63		OMIT
27	1 3" PLUG VALVE BY VAL-MATIC	64	1	3" DIP FLG x PE 56" SPOOL
28	OMIT	65		OMIT
29	OMIT	66		OMIT
30	1 3" DIP FLG x FLG 12" SPOOL	67		OMIT
31	1 7'x14'x8' DEEP PRECAST CONCRETE VALVE VAULT	68		OMIT
32	OMIT	69		OMIT
33	OMIT	70		OMIT
34	1 3" DIP SLEEVE (LONG), MJ, W/ RESTRAINTS, SS HARDWARE	71	1	1/2" Ø STAINLESS STEEL CABLE
35	OMIT	72 - 79		OMIT
36	OMIT	80	1	V200 FILTER WITH 200 MICRON SCREEN
37	1 Jin DIP FLG x PE, 54" SPOOL	81	2	10" CL 125 CAST IRON BLIND FLANGE
38	OMIT	82	1	14" CL 125 CAST IRON BLIND FLANGE
a contract of the contract of				

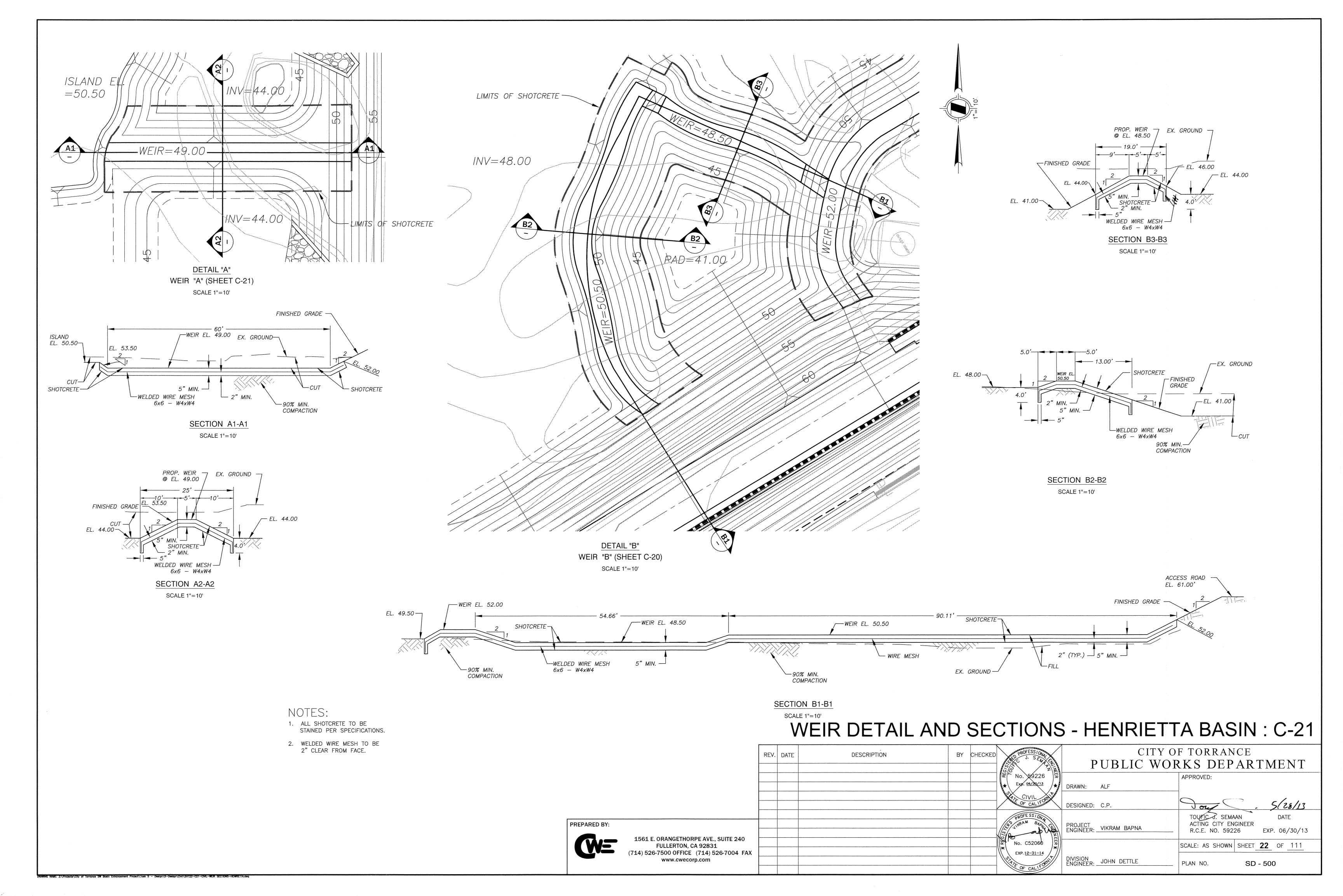
ADJUSTABLE PIPE STAND, FOR 3 in DIP, FLG STYLE

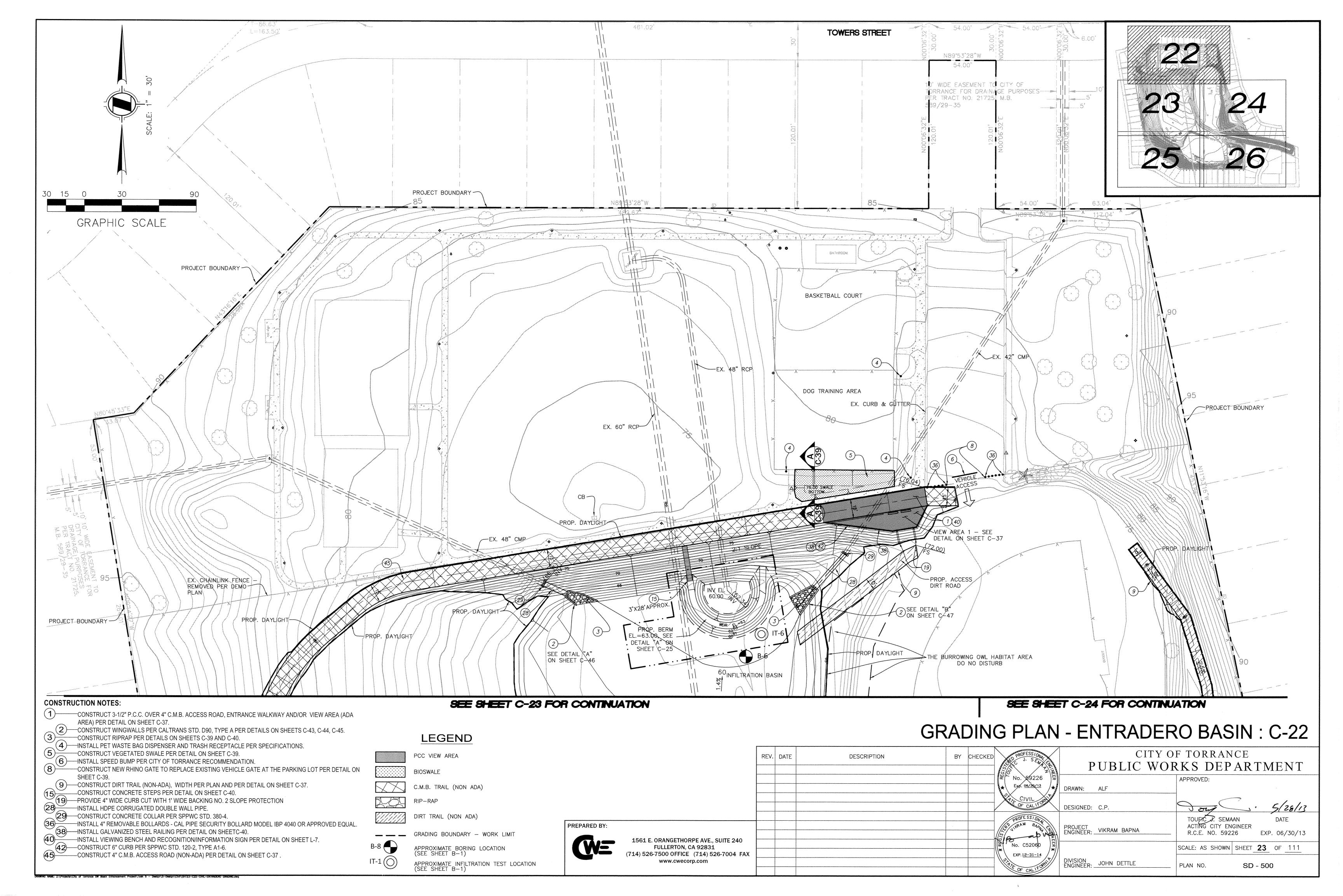
PUMP 4 CHAP	RACTERISTICS
DESCRIPTION	VALUE
DESIGN FLOW	58.9 gpm
TOTAL DYNAMIC HEAD	201.1 ft
HORSE POWER	14.8
FLA	18.6A
MAX PUMP SPEED	3530 rpm
POWER SUPPLY	3PHASE 480V
NUMBER OF PUMPS	1
FREQUENCY	60 HZ

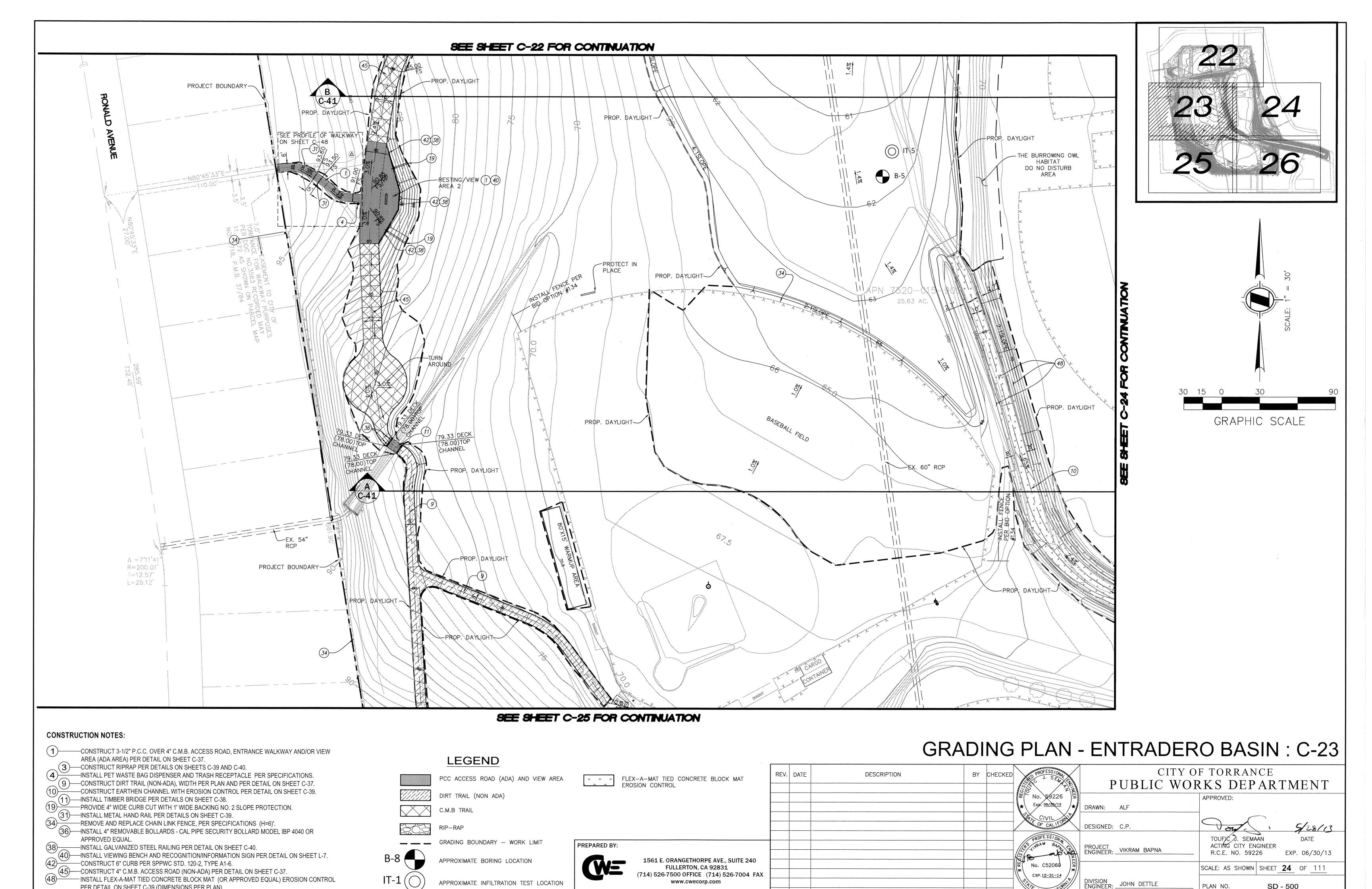
# AMIE BASIN PUMP STATION PARTS LIST: C-19

	REV. DATE	DESCRIPTION	BY	CHECKED PROFESSIONAL BILES PAGE	1	OF TORRANCE ORKS DEPARTMENT
				© No. 58339 Z = Exp. 12/3 V 14 ★	)	APPROVED:
				CIVIL OF CALIFORN	DRAWN: ALF	SBe 1/22/14
PREPARED BY:				PROFESSIONAL PROPERTY OF THE P	DESIGNED: C.P.	CRAIG BILEZERIAN DATE
AFCA E ODANOSTHODDE AVE CHITE OAC				Po abia	PROJECT VIKRAM BAPNA	CITY ENGINEER  R.C.E. NO. 55339 EXP. 12/31/14
FULLERTON, CA 92831 (714) 526-7500 OFFICE (714) 526-7004 FAX				No. C52060	DIVISION	SCALE: AS SHOWN SHEET 20 OF 111
www.cwecorp.com				VIE OF CALIFORNI	DIVISION ENGINEER: JOHN DETTLE	PLAN NO. SD - 500



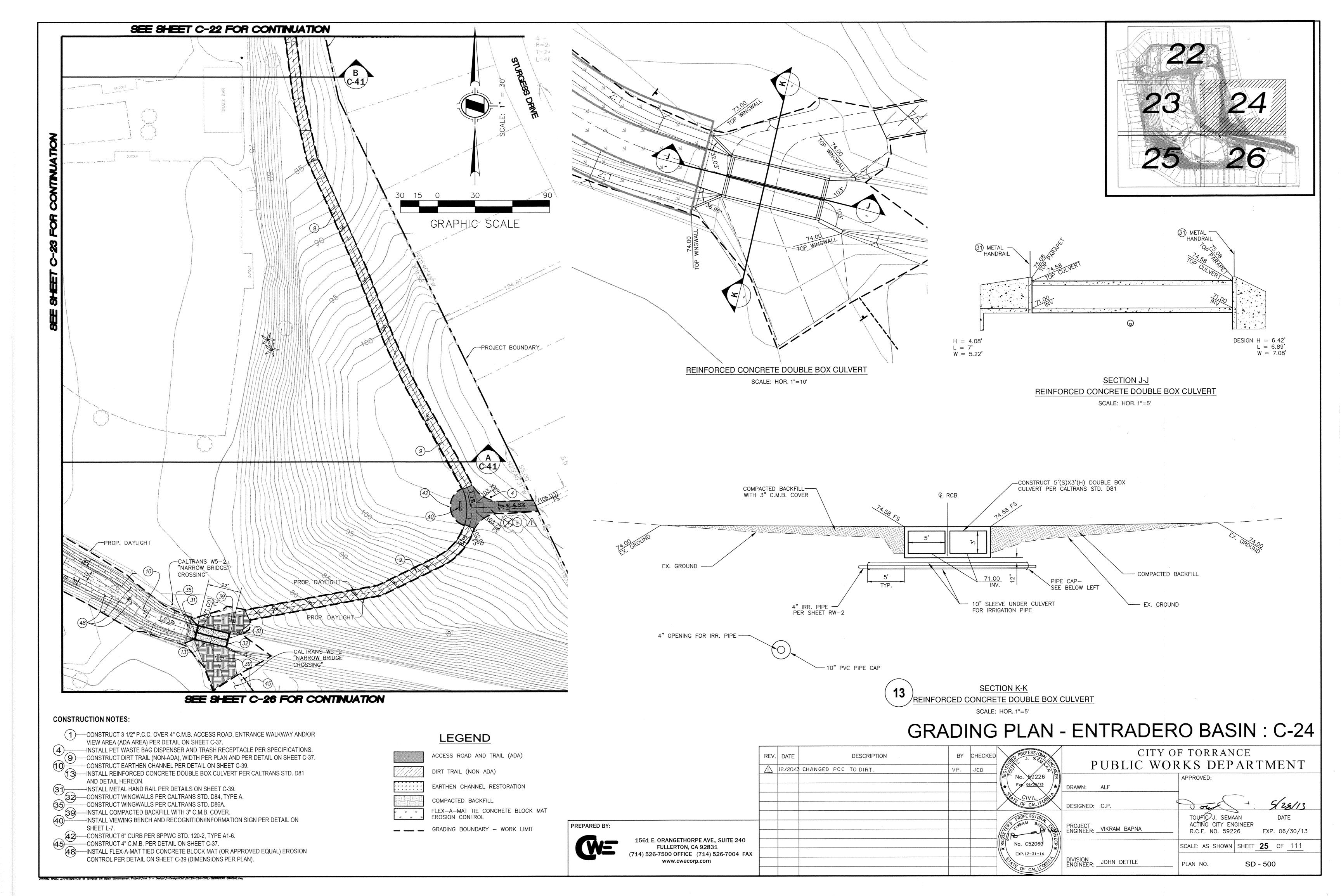


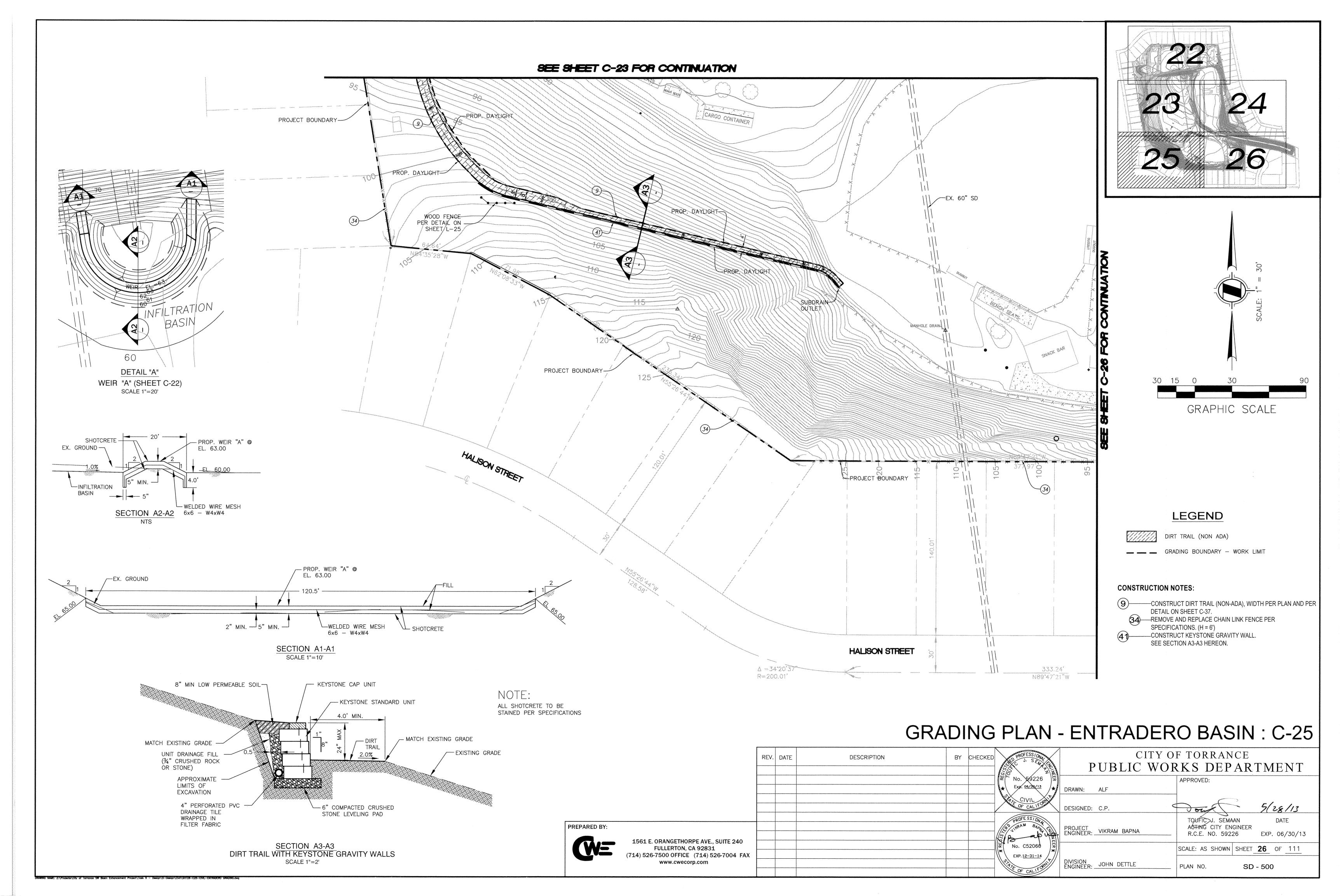


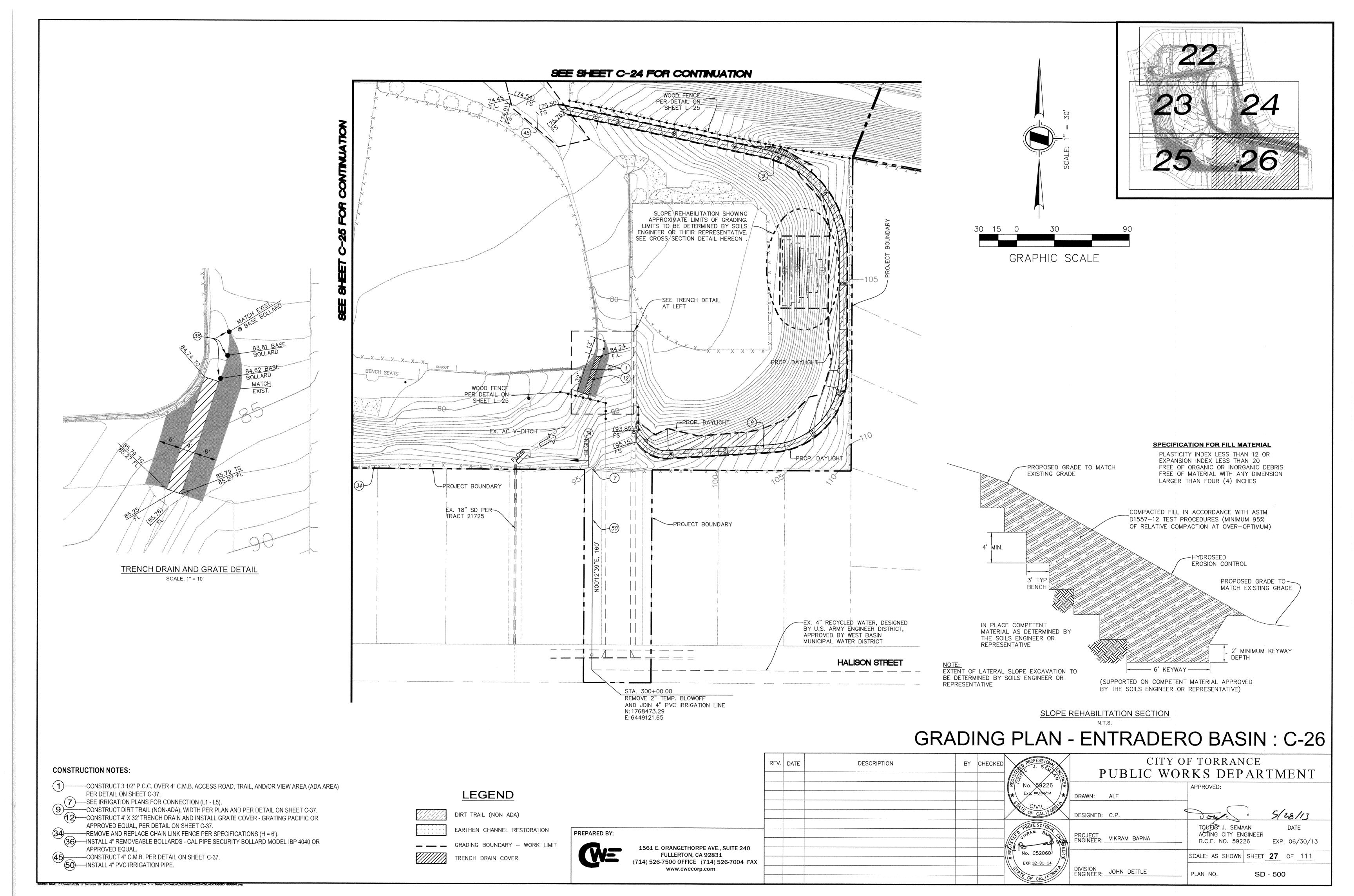


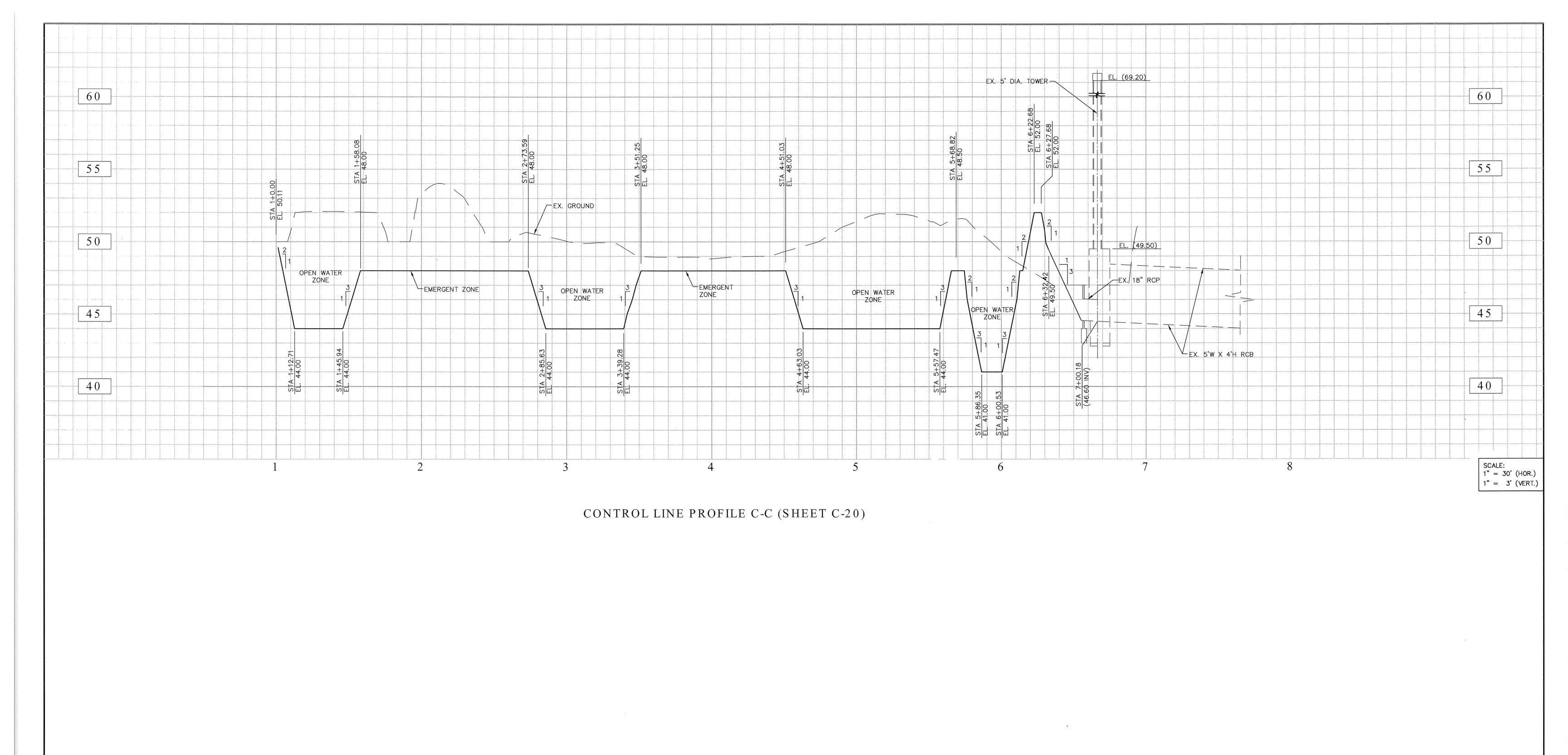
PLAN NO.

SD - 500

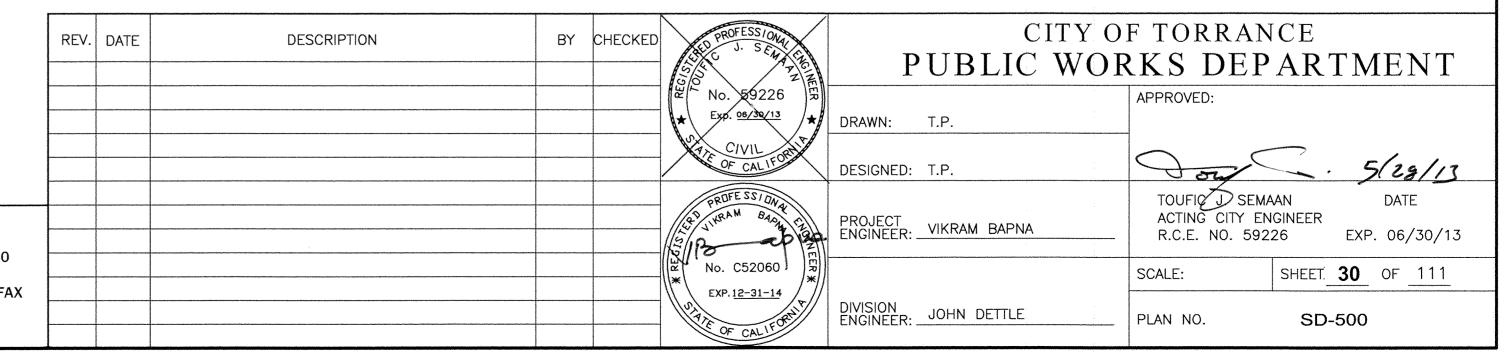




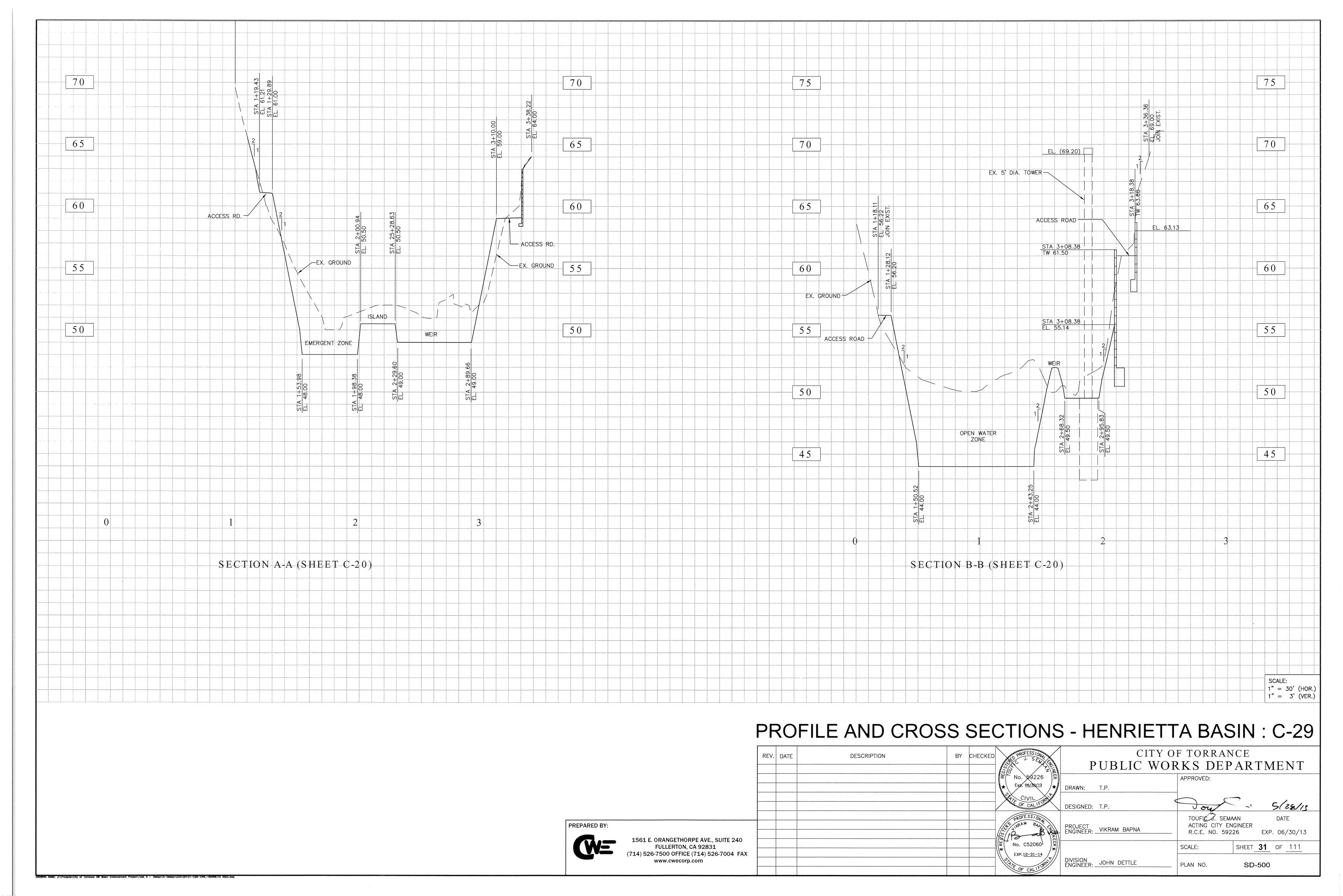




# PROFILE AND CROSS SECTIONS - HENRIETTA BASIN : C-28



1561 E. ORANGETHORPE AVE., SUITE 240
FULLERTON, CA 92831
(714) 526-7500 OFFICE (714) 526-7004 FAX
www.cwecorp.com



ID	MAP#	STREET	NEAREST X-STREET	CORNER	CB_TYPE	V_IN	V_OUT	WIDTH
039-2-01	SD-0039	CARMELYNN ST	WILMA ST	N	2	7.0'		7'
039-2-02	SD-0039	CARMELYNN ST	WILMA ST	s	2	8.0'		7'
039-2-04	SD-0047	DEL AMO BLVD	HENRIETTA ST	NE NE	39	4.0'		7'
039-3-06	SD-0027	VICTOR ST	DEL AMO BLVD	sw	2	5.70'		7'
039-3-07	SD-0027	VICTOR ST	DEL AMO BLVD	SE	2	3.5'		7'
039-5-03	SD-0047	WAYNE AVE	WHITE CT	NW	40	4.75'		14'
039-5-04	SD-0047	WAYNE AVE	WHITE CT	E	40	8.0'		14'
039-5-12	SD-0047	WAYNE AVE	WHITE CT	SW	39	4.25'		7'
039-5-13	SD-0047	HENRIETTA ST	SPENCER ST	NW	40	4.75'		14'
039-5-14	SD-0047	HENRIETTA ST	SPENCER ST	NE NE	40	3.75'		14'
040-1-01	SD-0045	DEL AMO BLVD	DONORA AVE	N	2	3.5'		7'
040-1-02	SD-0045	DONORA AVE	DEL AMO BLVD	NE NE	2	4.07'		7'
040-1-03	SD-0045	DONORA AVE	KONYA DR	W	2	5.50'		7'
040-3-01	ST-309	DEL AMO BLVD	EARL ST	NW	1	4.5'		3.50'
040-3-02	ST-309	DEL AMO BLVD	EARL ST	SW		5'1"		
040-3-04	SD-377	KONYA DR	EARL ST	NE NE	3	4.0'		3.50'
040-3-05	SD-377	KONYA DR	EARL ST	CUL-DE-SAC	3	4.60'		14'
040-3-09	SD-377	KONYA DR	EARL ST	SE SE	2	4.0'		7'
040-4-01	SD-0045	DONORA AVE	KONYA DR	SE		3.35'		7'
040-5-10	SD-400	ANZA AVE			2	3.33		
040-5-10	SD-400	SPENCER ST	SPENCER ST  ANZA AVE	NW	2			7'
040-5-12	SD-177	SPENCER ST			2	4.001		7'
040-6-01	SD-377	MICHELLE DR	W/EARL AVE EARL ST	NW DE SAC	3	4.00'		14'
040-6-03				CUL-DE-SAC	3	4.60'		3.50'
040-6-04	SD-431	EARL ST	SPENCER ST	NW	3	4.0'		21'
	SD-431	SPENCER ST	EARL ST	NE NE	2	3.67'		7'
040-6-05	SD-431	SPENCER ST	EARL ST	NE 6 7.0'			21'	
046-2-04	SD-47	HENRIETTA ST	EDGEMERE DR	NW 40 6.00'			28'	
046-2-05	SD-47	HENRIETTA ST	EDGEMERE DR		NE 39 4.50'			7'
046-2-06	SD-47	HENRIETTA ST	EDGEMERE DR	NW	40	5.00'		28'
046-2-13	SD-469	VACCARO AVE	GARNET ST	SE	300-1	4.0'		10'
046-3-04	SD-469	ENTRADERO AVE	GARNET ST	NW	300-1	3.84'		10'
046-5-03	SD-1053	LORNA ST	HENRIETTA ST	NW	300	4.75'		10'
046-5-04	SD-452	ANNRITA AVE	LORNA ST	NW	307-0	7.57'		7'
046-5-06	SD-1053	LORNA ST	HENRIETTA ST	SW	307	4.75'		14'
047-1-03	SD-265	GARNET ST	ANZA AVE	W	2	4.00'	AR	EA DRAIN 2- 2'x3
047-2-11	SD-177R1	SPENCER ST	ANZA AVE	SE	1	3'6"		3.50'
047-2-13	SD-174	ANZA AVE	SPENCER ST	SW	3	5.0'		21'
047-2-17	SD-217	ALLEY E/ANZA AVE	SPENCER ST	S	5	3'6"	AR	EA DRAIN 3-2'x3
047-2-18	SD-174	ANZA AVE	SPENCER ST	SW	3	4.80'		14'
047-2-20	SD-174	ANZA AVE	SPENCER ST	SE	1	3.50'		3.50'
047-2-25	SD-174	GARNET ST	ANZA AVE	SW	3	4.80'		14'
047-2-28	SD-174	ANZA AVE	GARNET ST	SW	3	4.60'		21'
047-2-32	SD-177R1	SPENCER ST	ANZA AVE	SE	3	4.00'	***************************************	10'
047-3-05	SD-431	SPENCER ST	EARL ST	SE	3	5.0'		14'
047-3-13	SD-308	MANSEL AVE	EMERALD ST	CUL-DE-SAC	1			3.50'
047-3-15	SD-308	EARL ST	EMERALD ST	NE	1	3.75'		3.50'
047-3-16	SD-308	EARL ST	EMERALD ST	NW	1	4.0'		3.50'
053-1-01	ST-0559	TORRANCE BLVD	HENRIETTA ST	NW	1			3.50'
053-1-04	ST-0559	TORRANCE BLVD	HENRIETTA ST	sw	3			14'
053-1-05	ST-0559	TORRANCE BLVD	HENRIETTA ST	SW	1			3.50'
053-2-04	SD-331	TORRANCE BLVD	HENRIETTA ST	NW	3	7.50'		14'

			COUNTY; HENRIETTA INLE	T LOCATION	is			
ID	MAP#	STREET	NEAREST X-STREET	CORNER	CB_TYPE	V_IN	V_OUT	WIDTH
046-2-14	SD-1053	GARNET ST	HENRIETTA AVE	NE	300	6'0"	6'6"	10'
046-2-15	SD-1053	HENRIETTA AVE	EDGEMERE DR	sw	307	4'6"		14'
046-2-16	SD-1053	HENRIETTA AVE	EDGEMERE DR	SW	307	4'6"	5'3"	14'
046-2-17	SD-1053	GARNET ST	HENRIETTA AVE	SE · .	300	5'3"		10'
046-2-18	SD-1053	HENRIETTA AVE	GARNET ST	SE	300	4'6"		7'
046-5-08	SD-1053	HENRIETTA AVE	EMERALD ST	NW	300	6'6"		4'
046-5-09	SD-1053	EMERALD ST	HENRIETTA AVE	NE	300	8'0"	8'6"	10'
046-5-10	SD-1053	EMERALD ST	HENRIETTA AVE	SE	300	7'9"		10'
046-5-11	SD-1053	ARTESIA ST	HENRIETTA AVE	NE	300	7'9"	8'6"	10'
046-5-12	SD-1053	HENRIETTA AVE	ARTESIA ST	SW	300	6'6"		3.50'
046-5-13	SD-1053	ARTESIA ST	HENRIETTA AVE	SE	300	7'6"		10'
046-5-14	SD-1053	HENRIETTA AVE	ARTESIA ST	SE	300	6'0"		3.50'
046-5-15	SD-1053	MARICOPA ST	HENRIETTA AVE	NE	307	8'6"	8'9"	14'
046-5-16	SD-1053	MARICOPA ST	HENRIETTA AVE	SE	307	8'0"		14'
046-5-17	SD-1053	HENRIETTA AVE	LORNA ST	NE	300	5'6"		3.50'
046-5-18	SD-1053	HENRIETTA AVE	LORNA ST	SE	300	6'0"		7'
047-3-19	SD-1021	EARL ST	SPENCER ST	SW				7'
047-3-20	SD-1021	EARL ST	SPENCER ST	SE				3.50'
047-5-08	SD-1021	MARICOPA ST	LADEENE AVE	NE				7'
053-2-13	SD-1053	LORNA ST	HENRIETTA AVE	NE	300	5'6"	6'0"	14'
053-2-14	SD-1053	LORNA ST	HENRIETTA AVE	SE	300	5'		14'
053-2-15	SD-1053	HENRIETTA AVE	LORNA ST	SE	300	6"0"		21'
053-2-16	SD-1053	HENRIETTA AVE	LORNA ST	SE				28'
054-2-06	SD-1021	MARICOPA ST	LADEENE AVE	SE				14'

		075	1154555		CD TVDE	\/ Ib!	VOUT	
ID	MAP#	STREET	NEAREST X-STREET	CORNER	CB_TYPE	V_IN	V_OUT	WIDTH
034-4-06	ST-0549	PRAIRIE AVE	CHALLENGER ST	SE	1	3.00'		3.50'
034-4-07	ST-0549	PRAIRIE AVE	CHALLENGER ST		SE 1			3.50'
041-2-03	SD-0164	DEL AMO BLVD	MARINER AVE	NW		<b>_</b>		14'
041-3-04	SD-0164	DEL AMO BLVD	MARINER AVE	NE	3	5.00'		14'
041-3-06	SD-0164	DEL AMO BLVD	MARINER AVE	S	2	7.0'		7'
041-3-07	SD-0164	NORTH OF AMIE	MICHELLE DR	N ON ALLEY	6	6.5'		7'
041-5-03	SD-291	ROSLIN AVE	WHITE CT	NE	1	4.00'		3.50'
041-5-05	SD-291	ROSLIN AVE	WHITE CT	NE	1	4.00'		3.50'
041-5-11	SD-291	ROSLIN AVE	WHITE CT	SW	1	4.00'		3.50'
041-5-12	SD-469	ALLEY	SARA DR	NW/ SARA	1	3.66'		3.50'
041-6-01	SD-0164	MICHELLE DR	AMIE AVE	NW	2	3.5'		7.0'
041-6-03	SD-0164	MICHELLE DR	AMIE AVE	NE	1	3.50'		7'
041-6-04	SD-0164	MICHELLE DR	MADISON ST	NE	1	3.50'		3.50'
041-6-04	SD-0164	MICHELLE DR	MADISON ST	SE	1	4.00'		3.50'
041-6-05	SD-0164	MICHELLE DR	AMIE AVE	SW	3	4.75'		14'
041-6-11	SD-0367	OSAGE AVE	SPENCER ST	CUL-DE-SAC	2	4.00'		7'
041-6-13	SD-0164	SARA DR	MADISON ST	NE	1	3.50'		3.50'
041-6-13	SD-0164	SARA DR	MADISON ST	NE	1	3.50'		3.50'
041-6-18	SD-0164	MADISON ST	WHITE CT	NW	2	3.50'		7'
041-6-19	SD-0164	MADISON ST	WHITE CT	NE 2		3.50'		7'
041-6-25		SPENCER ST	AMIE AVE	SE				28'
041-6-26		SPENCER ST	AMIE AVE	SW				28'
042-1-03	SD-0341	MADRONA AVE	DEL AMO BLVD	NW	NW 3			14'
042-1-04	SD-0341	MADRONA AVE	DEL AMO BLVD	NE	3	5.00'		14'
042-1-06	SD-0341	DEL AMO BLVD	MADRONA AVE	NW	1			3.50'
042-1-09	SD-0367	DEL AMO BLVD	MADRONA AVE	NE	2	4.00'		7'
042-1-12	SD-0367	DEL AMO BLVD	MADRONA AVE	NE	3	5.20'	6.00'	10'
042-1-13	SD-0341	DEL AMO BLVD	MADRONA AVE	sw	1			3.50'
042-2-01	SD-0367	DEL AMO BLVD	MADRONA AVE	NE	2	4.00'		7'
042-4-02	SD-0341	MADRONA AVE	DEL AMO BLVD	NE	3	4.00'		10'
042-4-03	SD-0341	MADRONA AVE	DEL AMO BLVD	NW	2			7'
048-3-01		SPENCER ST	AMIE AVE	NW				7'
048-3-04	SD-294C	EASTWOOD AVE	EMERALD ST	CUL-DE-SAC	1	4.35'	5.00'	3.00'
048-5-06	SD-114	REGINA AVE	ALLEY S OF EMERALD AVE	SE	5		AREA DR	AIN 2'x6' (2-2')
048-6-03	SD-114	AMIE AVE	EMERALD ST	SW	6	7.00'		10'
048-6-04	SD-114	AMIE AVE	EMERALD ST	SE	3	5.00'		14'
049-1-03	SD-0339	MADRONA AVE	ONYX ST	NW	1			3.50'
049-1-04	SD-0339	MADRONA AVE	ONYX ST	NE	3	***		10'
049-4-04	SD-294C	ONYX ST	MADRONA AVE	sw	2	4.50'		7'
049-4-06	SD-0339	MADRONA AVE	ONYX ST	SW	1			3.50'
049-4-11	SD-0339	EMEARLD ST	MADRONA AVE	NW	1			3.50'
049-4-14	SD-0339	EMERALD ST	AVIS AVE	SW	1	3.00'		3.50'
	SD-0339	EMEARLD ST	MADRONA AVE	SW	1	3.00'		3.50'
049-4-15	30-0339		1	I	ı	1	1	1
<del></del>	SD-0339	AVIS AVE	EMERALD ST	sw	3			10'
049-4-15 049-4-17 049-4-18			EMERALD ST EMERALD ST	SW SE	3			10' 3.50'

ID	MAP#	STREET	NEAREST X-STREET	CORNER	CB_TYPE	V_IN	V_OUT	WIDTH
048-3-07	SD-1021	AMIE AVE	SPENCER ST	SE	3	5'2"		10'
048-3-08	SD-1021	AMIE AVE	SPENCER ST	SW	2	4.3		7'
048-3-09	SD-1021	EASTWOOD AVE	GARNET ST	NW	1	5'8"		3.50'
048-3-10	SD-1021	EASTWOOD AVE	GARNET ST	NE	1	5'10"	6'0"	3.50'
048-3-11	SD-1021	OSAGE AVE	GARNET ST	NW	7	4'6"		3.50'
048-3-12	SD-1021	OSAGE AVE	GARNET ST	NE	1	5'10"	6'0"	3.50'
048-3-13	SD-1021	GARNET ST	MADISON ST	NW	1	5'9"		3.50'
048-3-14	SD-1021	GARNET ST	EASTWOOD AVE	NE	1	5'9"		3.50'
048-3-15	SD-1021	GARNET ST	AMIE AVE	sw	3	5'6"		14'
048-3-16	SD-1021	GARNET ST	MADISON ST	sw	4		ARE	A DRAIN 2-2'x
048-3-17	SD-1021	GARNET ST	MADISON ST	SE	1	3'6"		3.50'
048-3-18	SD-1021	AMIE AVE	GARNET ST	sw	2	6'0"		7'
048-3-19	SD-1021	AMIE AVE	GARNET ST	SE	2			7'

EMERALD ST

SD-0339 MADRONA AVE

NOTES TO THE CONTRACTOR TO FIELD VERIFY THE SIZE OF EXISTING INLETS PRIOR TO INSTALLING TRASH INTERCEPTOR.

CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR LOS ANGELES COUNTY CATCH BASINS FOR PERMITTING.

ID	MAP#	STREET	NEAREST X-STREET	CORNER	CB_TYPE	V_IN	V_OUT	WIDTH
024-4-03	ST-743	ANZA AVE	190TH ST	SE	2			7:
024-4-04	ST-743	ANZA AVE	190TH ST	sw	2			7'
024-4-06	ST-743	ANZA AVE	ARVADA ST	NE	2			7'
024-4-08	ST-743	ARVADA ST	ANZA AVE	NE	2			7'
024-4-09	ST-743	ARVADA ST	ANZA AVE	SE	2			7'
030-3-03	SD-285	MILDRED AVE	TOMLEE AVE	NW	1	4'0"		3.50'
030-6-01	SD-285	FLAGLER LN	TOWERS ST	NW	3	3'9"		14'
030-6-06	SD-285	TOMLEE AVE	NORTON ST	NW	2	3'6"		7'
030-6-06	SD-285	TOMLEE AVE	NORTON ST	NE	1	4'0"		3.50'
030-6-08	SD-285	MILDRED AVE	TOMLEE AVE	SE	2	4'0"		7'
030-6-09	SD-285	MILDRED AVE	TOMLEE AVE	sw	2	3'6"		7'
031-1-04	SD-0039	RONALD AVE	TOWERS ST	NW	3	9.0'		21'
031-1-05	SD-0039	RONALD AVE	TOWERS ST	SE	3	8.0'		21'
031-2-02	SD-0039	TOWERS ST	STURGESS DR	sw	2	6.5'		7'
031-4-04	SD-285	REDBEAM AVE	DEELANE ST	NE	2	4'0"		7'
031-4-05	SD-285	LINDA DR	DEELANE ST	NE	2	4'0"		7'
031-4-05	SD-285	LINDA DR	DEELANE ST	NW	1	4'0"		3.50'
031-4-10	SD-285	REDBEAM AVE	DEELANE ST	SW 1 3		3'6"		3.50'
031-4-11	SD-285	REDBEAM AVE	DEELANE ST	SE 2		4'0"		7'
031-4-14	SD-285	DEELANE ST	LINDA DR	SE 2		4'0"		7'
031-5-03	SD-0039	HALISON ST	HALISON PL	NW 1 4'0"			3.50'	
031-5-04	SD-0039	HALISON ST	HALISON PL	SW 1 3'6"			3.50'	
031-6-06	SD-0039	HALISON PL	HALISON ST	N	1 4'0"			3.50'
032-1-01	ST-743	ANZA AVE	TOWERS ST	NW	2			7'
032-1-03	ST-743	ANZA AVE	TOWERS ST	NE	2			7'
032-1-04	ST-743	TOWERS ST	ANZA AVE	NE	2			7'
032-1-06	ST-743	TOWERS ST	ANZA AVE	SE	3			3.50'
032-1-09	ST-743	ANZA AVE	NARROT ST	NE	2			7'
032-1-10	ST-743	ANZA AVE	NARROT ST	NE	2			7'
032-1-12	ST-743	NARROT ST	ANZA AVE	NE	3			3.50'
032-1-14	ST-743	NARROT ST	ANZA AVE	SE 2				7'
032-1-15	ST-743	ANZA AVE	NARROT ST	sw	2			7'
032-1-18	ST-743	ANZA AVE	NARROT ST	sw	2			7'
032-4-02	SD-0023	DEELANE ST	FLAVIAN AVE			4'6"		28'
032-5-01	ST-743	ANZA AVE	DEELANE ST	NE	2			7'
032-5-03	SD-0066	DEELANE ST	INGLEWOOD AVE	NE	2	3'6"		7'
032-5-04	SD-0066	DEELANE ST	INGLEWOOD AVE	NE	6	4'6"		5'
032-5-05	SD-0023	ANZA AVE	DEELANE ST	SE	9	4'0"		21'
032-5-06	SD-0023	ANZA AVE	DEELANE ST	SE	6	6'9"		5'
032-5-07	SD-0023	ANZA AVE	DEELANE ST	sw	6	8'9"		5'
032-6-04	SD-93	TALISMAN ST	HALISON ST	NW		5-CURB	 DRAINS W=4', 2.5	5', 3.75', 2 <i>.</i> 5'.

# INLET LOCATION TABLES: C-30

ED BY:  PROJECT VIKRAM BAPNA  TOUPIC J. SEMAAN DATE PROJECT VIKRAM BAPNA  R.C.E. NO. 59226 EXP. 06/						IINLE	ILOCATION	1 ABLES : C-30
ED BY:  APPROVED:  DRAWN: ALF  DESIGNED: C.P.  DESIGNED: C.P.  TOURIC J. SEMAAN DATE ACTING CITY ENGINEER R.C.E. NO. 59226 EXP. 06/		REV. DATE	DESCRIPTION	BY	CHECKED	PROFESS/OWAY		
EXP. 06/30/13  DRAWN: ALF  DESIGNED: C.P.  DESIGNED: C.P.  TOUPIC J. SEMAAN DATE  PROJECT ENGINEER: VIKRAM BAPNA  R.C.E. NO. 59226 EXP. 06/						(E) 12/3	PUBLIC WOR	RKS DEPARTMENT
DESIGNED: C.P.  DESIGNED: C.P.  TOUPIC J. SEMAAN DATE  PROJECT VIKRAM BAPNA CTING CITY ENGINEER  R.C.E. NO. 59226 EXP. 06/								APPROVED:
ED BY:  PROJECT VIKRAM BAPNA  PROJECT VIKRAM BAPNA  R.C.E. NO. 59226 EXP. 06/				***************************************			DRAWN: ALF	
ED BY:  PROJECT VIKRAM BAPNA  R.C.E. NO. 59226 EXP. 06/						OF CALIFORN	DESIGNED: C.P.	Jour 5/28/13
ENGINEER: VIKRAM BAPNA R.C.E. NO. 59226 EXP. 06/	ED BV:					PROFESSIONAL	DD0 ISST	TOUTICOL. SEMAAN DATE
1561 E. ORANGETHORPE AVE., SUITE 240  FULL EPTON CA 92831					The second of th	(5) Pa 3 (2)	ENGINEER: VIKRAM BAPNA	1
TOLLERION, ON 32031	FULLERTON, CA 92831							SCALE: AS SHOWN SHEET 32 OF 111
www.cwecorn.com	(114) 323 1333 31113E (114) 323 1334 1AX					EXP. 12-31-14	DIVISION JOHN DETTI E	
PLAN NO. SD - 500	·		·	-		OF CALIFORN	ENGINEER: DOTTIN DETTEL	PLAN NO. SD - 500

